COLMAN'S RURAL WORLD

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Sorgo Department.

The Rural World is the only journal in the United States having a special department devoted to syrup and sugar making from sorgo.

Cane Culture and Manufacture in Iowa.

COL. COLMAN: The first step is the preparation of the soil, and should be in the fall, in order to facilitate the planting, which should be done as early as the first of May or last of April. The ground should be thoroughly harrowed, then planted with a two-horse corn planter in rows as corn, except it should be twenty-four or thirty inches apart in the rows, with five or six grains in a hill. Don't let your knives into the ground, but drop your seed on the top of the ground, having shovels in front of the wheels to throw the dirt onto the seed, the wheels packing the dirt down smoothly. Nothing more is to be done until the cane is one or two inches high, then take a common garden rake, and give each hill a couple of scratches as you walk, not being very careful how you do it. The cane plants will bear more raking than weeds, being deeper rooted, and the weeds will be entirely eradicated. Watch the weeds, and if the cane is too small to plow with a cultivator, give it another raking; then plow thoroughly as is customary with corn, say four or five times.

When the seed is about half ripe, strip your cane; then top and cut as soon as possible, and work up as soon as you can, or keep dry until crushed. Then it should be defecated and evaporated speedily. Have plenty of water convenient to your works, and use plenty of water in cleansing all pans and other articles in use about the premises. To describe the process of manufacture, would be too tedious for this article. If you don't understand the business, the best thing you can do is to obtain the services of an expert for one season. After that you can manage it yourself. You will gain time, and make money and credit by receiving instructions in the start. The use of lard, sulphur, lime and other articles, can hardly be described definitely enough to enable a person to use them correctly, or as they should be. It would require a book of 200 pages or more to do this properly, but I will briefly describe the process of sugar making in as few words as possible.

We will begin with the juice as it leaves the mill, which runs into a deep pan or box, in the middle of which is placed a piece of perforated tin strainer, long enough to extend across the pan, and wide enough to prevent the juice from flowing over. In the end of this pan, which contains the strained juice, a gate is placed to draw the juice into the two defecating pans, placed side by side, in which should be placed a copper coil, filling one while using out of the other. The quantity of lime used is determined by litmus paper. Mr. Bozarth of Cedar Falls, a successful sugar maker, says he can do it without the litmus paper, since he has had some experience. He says any person can dispense with the litmus paper, after he becomes an expert.

To determine the best kind of evaporator is a matter of difficulty. I think the Cook a very good one. Some think otherwise. I think one divided lengthwise, similar to C. Bozarth's of Cedar Falls, better than the Cook. It is easier to attend, and the grade of his sorghum and mush is not equaled in the United States. My opinion is that we should dispense with the fire under the evaporator. The evaporating should be done with steam altogether, and the probability is that all extensive manufacturers will adopt steam. This is my intention. I have visited Mr. Bozarth's works twice. He tells me he has ordered a 40-horse boiler for that purpose. If you use fire for evaporating, you should have the assistance of a steam coil in your heater, at the opposite end from the fire, or extending the whole length. The size of your pans must be determined by the quantity you wish to make, or the capacity of your mill. I have the largest mill in the State of Iowa, but my evaporating capacity is not in proportion; yet I will improve some this season, perhaps double. My two pans are each sixteen feet long. I tried heating with the exhaust steam, but had not my pan arranged right. The bottom would spring too much. I had two bottoms, one an inch below the other. If it had been properly done, it would have been a success. I shall try it again, and report to the RURAL WORLD. My works are situated in Lester township, Black Hawk county, Iowa. B. E. BROWN.

Lester, Ia., November 5.

Amber Cane in 1881.

COL. COLMAN: Having a wide correspondence with the Amber cane growers of the northern States, I have thought that a brief review of the season's work might perhaps be of interest to your readers.

The weather of the past season has been exceptional throughout the north, and has been more or less disastrous to most farm crops. An unusually severe winter was followed by a cold and late spring and a summer drouth unprecedented in severity. As a consequence all the staple crops suffered, and Amber cane with the rest, but no more than the rest. In fact it has been a test year with Amber cane and the question is settled that it can stand the worst vicissitudes of a northern climate as well as any other staple crop. This is a great point gained.

The lateness of the spring prevented many from planting who were intending to do so. Poor seed forced a replanting in many cases, so that almost everywhere the crop was late.

In parts of Kansas, Iowa and Nebraska, the chinch bug made sad havoc with the cane. I have heard it stated that the chinch bug never troubled the cane unless it was planted on wheat stubble or contiguous to wheat fields, and I should like to know if this is a fact, for it is important if true? Then came the terrible drouth is those States, when the hot south wind was like a desert simoon, and withered up every green thing. But the cane withstood this terrible drouth better than any other crop, and in many places is the crop to stand between the farmer and starvation. It has proved also to be the most reliable fodder crop for a dry season.

In nearly all the northern States the drouth was very severe, withering the grass and drying up the water-courses and greatly injuring most late crops. In Minnesota and some other western States, severe hail storms and cyclones did great local damage, and heavy fall rains materially interfered with harvesting. With these meteorological misfortunes, the year 1881 may well be set down as an off year for Amber cane. But it has also been equally an off year for all other crops. In fact the cane has seemed to stand these misfortunes better than other crops, and those farmers who have raised it have generally realized more profit per acre from it than from any other crop.

The advantages of thorough culture were very marked this season. Farmers who exercised care in selecting their soil and then thoroughly cultivated, found their cane to withstand the drouth, while their neighbors who neglected their crop lost it. There is no crop that will give better returns for thorough cultivation than cane.

In Kansas, quite a number of large steam mills have been erected during the season, and while the drouth curtailed, their business so much as to leave little or no profit, they made a fair beginning and will be a stimulus to planting a large acreage around next season. Considerable advance has also been made in Nebraska and Iowa. In Mennesota, owing to their severe winter and late spring, there was probably no increase of acreage over the year before, but those who did plant have had good crops. Wisconsin has made considerable advance. In Illinois, Indiana and Michigan, there are only a few isolated localities where cane has been raised. New York, Pennsylvania, and New Jersey, are just beginning to wake up to the importance of the new industry, and the few farmers who have tried it this season have had good success, something has also been done in Canada, in an experimental way with good results.

On the whole, Amber cane has made a satisfactory advance during this season. In the new region where it has been tried, the satisfactory results have attracted the attention of farmers toward it, and many more will try it the coming season. Farmers are learning how to handle it and will get better results each year. The meteorological conditions of the past season have proved it to be as safe and sure a crop as can be raised in the northern States. It has generally proved itself to be the most profitable in the localities, where it has been raised. Whether it will continue to be a profitable crop in case its cultivation becomes general, remains to be seen. If you desire it I will discuss this point in a future paper.

GEO. L. SQUIER.

Buffalo, Nov., 15th, 1881.

REMARKS.—Our columns are open for the discussion of all questions relating to this industry. We shall be glad to hear from you on the point suggested.

The Sugar Harvest.

We noticed during a recent journey through several counties, in this state that the cane crop promises an abundant harvest. In a few instances we saw farmers cutting up their cane. As the season is at hand when we shall be in the midst of the sugar harvest, we give the following advice in regard to working up northern cane, from the pen of a gentleman who has had considerable experience in this branch of industry on the farm:

As in most other kinds of business, the making of sugar and syrup from the cane can be best and most economically conducted on an extensive scale. A powerful mill will extract more juice, than a large one, frequently enough more to constitute the differnce between a paying and a losing business. And the same remark applies with equal force to most of the other processes of the whole industry. A furnace constructed to consume the bagasse, as the crushed cane is termed, and to use the resulting heat in assisting the boiling down of the juice, will greatly economize the labor and expense of fuel; and a proper equipment of juice cisterns, evaporators, coolers, etc., will so increase the character of the product as to insure a profit, when otherwise a loss will be the result.

A small horse-power outfit, suitable for the use of a few neighbors, will be first described, and the main principles which must be observed in the handling of cane juice will be mentioned. In reducing these principles to practice a little experience united to good common sense, will soon enable any one to attain satisfactory results.

THE BEST LOCATION FOR THE MILL,

especially if steam is employed, is a hillside. The juice from the mill will then will flow to the cisterns and thence to the evaporator and coolers without any intermediate pumping or manual handlings. A vertical three-roller mill, with the sweeps attached direct to the main roller, will be the most satisfactory arrangement for a small establishment, and the least expensive. But the labor of supplying such a mill with cane and of keeping the bagasse out the way is considerable, to avoid which many mills are constructed with an elongated shaft to which the teams are attached in an upper story of the cane-shed. By this arrangment access can be had to and from the mill without having to dodge between the teams. A still better plan is a horizontal mill, constructed, as threshing machines usually are, to the horse-power by tumbling-rods. Such a mill is more liable to get out of order, runs a little heaveir and is more expensive, but as carriers can be attached to convey the cane to the mill, and the bagasse away, and no feeder is necessary, the nominal labor is greatly lessened by the use of a horizontal mill. But for a small business the simple vertical mill will give the best satisfaction. Bear in mind that whatever mill you get it should be very strong, so that all the juice of the cane may be extracted without fear of a breakdown.

HORIZONTAL AND VERTICAL MILLS

should be geared so that the cane will not go through faster than at the rate of fifteen feet per minute. If a greater speed than this is permitted a corresponding loss of juice will result, as instead of descending the sides of the rollers it will be taken up and go out with the crushed cane. And care should be frequently exercised to see that the mill is properly oiled, and is doing good work. In selecting your mill get one that can be kept clean; and when in operation be sure to wash out frequently. In sugar-making you will find the old adage reversed, and that cleanliness is, if possible, more than godliness, necessary to success. You may use a "cuss" word at long intervals and succeed, but if you permit the juice to acquire the least acidity, which it will if you do not keep the mill, cisterns, etc., scrupulously clean, the taste and color of the syrup will be materially injured.

TWO OR THREE CISTERNS OR RECEIVING TANKS,

two or three feet square and two feet deep, should be provided to receive the juice from the mill. They are usually made of wood, but galvanized iron or zinc would be much better, and the same remark applies to all the spouts, etc.; the juice is not so liable to acquire acidity in contact with them. In these tanks the juice will settle, and the clear liquid can be drawn off into the evaporator, as required, each vat alternately. In these vats the juice may be treated, with lime-water to which a little sulphur has been added, which will correct the great tendency to acidulation and discoloration which immediatly follows the extraction of the juice from the cane. A familiar instance of this is the readiness with which a sweet apple turns to a dark color when the removal of the skin permits contact with the air.

The "Cook" pan—constructed so that by means of partitions the juice, in the descent from one end to the other, flows back and forth across the pan—is an excellent arrangement. There are others claimed to be equally good or better. As lately improved, the Cook possesses all the qualifications necessary for the successful work of a small establishment. Whatever pan is used, it should be set on a brick or stone arch, and care should be had that the chimney is large enough to secure a good draft. A damper between the pan and chimney, to regulate the draft, is very useful. If sugar is desired, a few coolers or wooden boxes, three or four feet square and one foot deep, should be provided, into which to run the syrup alternately to the depth of a couple of inches. Granulation is much more apt to occur if thus allowed to cool before a fresh "strike" is run into the cooler.

A temporary building, or at least a roof over the whole arrangement, is so desirable as to be almost a necessity. The "rig" can be got up at an expense of from $200 to $500—as the purchaser may display a skill in making bargains. The old mills and pans now lying on the old iron heaps about the country are not included in this estimate, though occasionally some may be had that are perhaps as good as new. With such a small establishment, one hundred gallons per day of nice syrup could be counted upon, requiring five hands to run it. If run continuously, as is much the most desirable, a relay of hands for the night will be required, but the product will be more than doubled.

But if a crop of one hundred acres is to be handled, a steam mill will be needed, of about the following description: The buildings should have a good roof, may otherwise be of the cheapest description. The cane shed should be twenty-five or thirty feet square, and the boiling and cooling room twenty by forty feet, and some additional storage room may be needed.

THE ENGINE SHOULD BE

six to eight horse power, attached to a horizontal mill with rollers, about 10-inch diameter by twenty long. A size larger mill would be still better. The mill should have a cane-carrier, alongside of which the cane may be dumped and fed to the mill by children if desired. A bagasse carrier will take the ground cane to the burner without intermediate handling. A twenty-horse-power tubular or flue boiler should be set so that the flame from the pan, passing through the bagasse burner, will heat the boiler, which should have grates for extra firing. The chimney must be large enough to insure a draft, the flue at least thirty inches in diameter and forty feet high.

The juice vats should be of metal, three feet square and eighteen inches deep, and should be furnished with steam coils, so that the first process of defecation, or removing the scum, could be done in them. As soon as the juice is directed into a vat, the steam is let on so that when the box is full it is about ready to boil. As soon as ebullition commences the scum coagulates and rises to the surface, whence it can be readily removed. Lime water added in small quantities, as a little experience will soon determine necessary, will be of very great advantage. If a small quantity of sulphur is used, it will also be advantageous. But the prompt application of heat is the main reliance.

IN THE EVAPORATION AND

concentration of the juice several methods are used. Advantage is taken of the fact that water boils at a very low temperature when the atmospheric pressure is removed to avoid the discoloration which high heat and exposure to the air occasions, and vacuum pans are used in large establishments for that purpose. But this method is too costly for ordinary use. The juice may be boiled down by the use of steam coils in open pans, or by the use of fire directly applied—with advantages in both methods. A large pan, acted upon by fire, in which the syrup would attain a temperature of from 210 to 220 degrees, to be finished by boiling in a steam pan or "battery" until 230 to 240 degrees, would be a very desirable arrangement. The scum can be entirely removed, which is a necessity, and the finishing can be accomplished without scorching, and the final heat is entirely under the control of the operator.

COOLERS, AS ALREADY MENTIONED,

shou'd be provided for the reception of the hot syrup, in which the granulation is soon developed. This occurs, under the most favorable condition, when the syrup is two or three inches deep. A gum is present in the sorghum juice which, if the manufacture has not been properly conducted, will be present in the granulated syrup, and will greatly hinder the separation of the sugar and syrup. When this is the case, a little hot juice, if poured over it, will facilitate the drainage. A centrifugal machine is used for the purpose, which can be constructed easily and is very effective. It consists of a cylinder of fine wire-cloth, enclosed in a larger one of iron. When made to revolve rapidly the contents of the inner compartment are thrown against its circumference, and the molasses passes through the gauze, leaving the dry sugar behind.

A steam establishment, such as has last been described, could probably be got up for $1,000 to $1,300. It would be able to make from three to four hundred gallons of very fine syrup per day. If run continuously, as it should be by all means, from Monday morning to Saturday night, with all allowance for bad weather, it would "take off" one hundred acres in six days.

THE QUESTION OF FUEL

is one which varies so much under different circumstances that a very exact answer cannot be made. Wood is much the best fuel, but coal is used both in Illinois and in Indiana with good results. As a general rule it may be said that one cord of good wood would make, with the assistance of the bagasse burner, from 100 to 150 gallons of syrup; or the cost of fuel may be set down at from two to five cents per gallon.

The manipulation of the juice may now be referred to. As soon as it comes from the mill, the defecation should begin, and the separation and removal of the scum be accomplished. As has been mentioned, this can best be affected by the use of steam coils in the receiving boxes. As soon as it comes to a boil the scum and gummy substances will rise to the surface, and if not then allowed to boil too hard can be readily removed. This is a most important step, and in Louisiana it used to be said that the art of sugar-making consisted in knowing how the skim the "grand," as the first kettle of the set in which this operation was performed was called. Lime is judiciously added, which greatly facilitates the separation of deleterious substances and corrects acidity. For the latter purpose a piece of litmus paper can be used—by its aid the neutralization of acidity with lime can be determined. Sulphur is also used with good results, and other articles are sometimes. Care must be used not to use these articles in excess, or the remedy will be worse than the disease, and your sirup will be "red as a fox's tail."—Minnesota Farmer's Union.

Agricultural.

State Mineralogy.

EDITOR RURAL WORLD: May it please you to give place in the valuable columns of your paper to some thoughts, observations and statistical facts, relative to the resources and products of the great State of Missouri, which, in comparison to its early future, is just now in its infancy. Allow me to say, from personal observation, that this large area of country is far more valuable than parties from a distance would believe, until convinced by personal inspection. I will at present call special attention to the mineral resources it has. Many may be somewhat familiar with the above resources, yet I will name some of the most prominent species, in order to refresh the memories of enterprising capitalists, so that Missouri may find its place in first rank with other States—senior to Missouri—who stand high and abound in wealth, owing to early as well as natural advantages; and after reaping their harvest of such, with the assistance rendered them by favor of the government, during the origin of the old thirteen States and since that time, in many instances, yet they indulge in talking about our imaginary streams, such as the Mississippi and Missouri rivers, and others congenial with the interests of a common country, being tributaries to the great Mississippi river. May they not forget the many fine products of this enterprising State, such as iron, lead, zinc, silver, nickel, bismuth, copper, sulphur, yellow and red ochre, block coal, bituminous coal and cannel coal, as rich as the world affords. We have the pure, white crystal sand in abundance—inexhaustible for all time to come from present appearances. The crystal plate glass, that is now being manufactured and has for some years, came to the front and stands there in spite of the former superiority of the French plate, which is of high and great merit; yet it now stands second, on account of the toughness and strength of the crystal plate glass, being superior in that respect. As to the appearance, beauty, fineness, &c., they seem to stand equal. I have known instances where both articles were kept by the same parties at the same price, and in all cases, wherein I have had the means of knowing the results of selection, the crystal glass took the lead. We also ship daily, car loads of crystal sand to Cincinnati, Pittsburg, New York, and many other points. Remember, it was not until Missouri uncovered her crystal sand that the French plate was excelled. So on this point especially we, as a State hold the fort.

I would call attention to the superiority of the article of different kinds of clay we have here. There is no finer clay for brick to be used in ordinary building purposes, as well as fire brick. We can compete with any and all other States on these two articles. We also have a very superior article of clay, as white as white can be, which is constantly shipped to New York—there used for the manufacture of porcelain ware. It is quite evident that this article is rare and uncommon, or it would not be sought after in such quantities that distance. We have an abundance of that material here, and can supply those that have none. We have slate, freestone, limestone, granite of different colors, excellent for building purposes, and quanities of blue and white rock, which makes a superior article of lime. Also marble, variegated white and blue; also red marble, commonly more used for furniture or indoor use than otherwise; also pure white marble. All this marble having a granular texture, crystalline, and is susceptible of as high enamel and transparent finish as any eastern marble is susceptible of. These facts alone are sufficient to warrant and satisfy all consistent, practical and scientific persons, who may as capitalist or otherwise be interested.

Now, of the mineral, I would say, there are many others of prominent importance not named, as well as many others of minor importance; but enough has been said this time on that subject, and I will talk more to you when I call some time again.

In relation to the good soils of various kinds, its fine timber, its fine water, alluvial soils, its adaptation to the stock—raising sheep, cattle, hogs and horses, and all kinds of live stock—the world cannot beat it. The fine climate, the short winter, and long summer and growing seasons, are really in favor of the stock grower and husbandman in every respect. As to what you may plant, have no fears but what you may reap an abundant harvest.

Now, as a last statement, allow me to say there is no healthier country this side of the deep waters. Come and see us, and look over the country for yourselves. Call on the proper and competent persons of your own selection, and be shown around by those who are familiar with the country.

W. W. WALLACE.

St. Louis, Mo., November, 1881.

At the Cottonseed Crushers' Convention, held recently in Cincinnati, Ohio, some important facts were elicited in regard to the use of the meal product as a fertilizer and as food for stock. According to the Commercial Bulletin's report, Mr. Hamilton, of Shreveport, Louisiana, said that he found cottonseed meal scarcely inferior to guano as a fertilizer and invaluable as a food for cattle. In exchanging meal for seed, one ton of the former was given for two and a quarter tons of the latter. Another member had demonstrated, by actual experiment on a farm in Connecticut, that the meal is the best fertilizer ever used on tobacco lands, tripling their productive capacity in three years, and is superior to any cattle food. Again, Mr. Barber, of Selma, claimed to have largely increased by the use of cottonseed meal the production of cotton on poor lands. In fact there was unanimous testimony to the value of cotton meal and cake not only for feeding cattle but as a fertilizer. In the quality of a feed stuff it is being used in Great Britain, Sweden, Norway, and to some extent in Russia.

Atlanta is happy as a young bride. Her cotton exposition is a great success, and then she had Coup's circus and a minstrel show. But what makes Atlanta grin most audibly is the making of two suits of clothes for two governors from cotton picked in the morning of the same day the clothes were made, and the wearing of the suits by the governors in the evening. This astonishing bit of labor was actually performed last week. It illustrates the life of our day, and reflects the progress of the century. Picking the cotton, spinning the thread, weaving the cloth, and then finishing up by cutting and making a suit of clothes—all in one day, is a surprising feat, and the whole country joins in praising Atlanta for performing it.

Farmers' Organizations.

[This Department will contain articles designed to advance the interests of the Granges, the Farmers' Alliance, and the Anti-Monopoly Organization.]

Official Grange Paper.

At a meeting of the executive committee of the Missouri State Grange, held in the city of St. Louis on the 3d day of December, 1880—all the members being present—it was agreed to accept the proposition, submitted by Col. Norman J. Colman, for publishing the official grange communications in the RURAL WORLD during the two ensuing years.

A. M. COFFEY,
Secretary of Executive Committee.
Knob Noster, Mo., December 6, 1880.

Rolla State Grange Resolutions.

The Missouri State Grange, at its late session at Rolla, unanimously adopted the following:

Whereas, COLMAN'S RURAL WORLD was one of the first papers in Missouri to espouse the grange cause, and to urge the farmers of the State to organize themselves into granges; and

Whereas, It has ever been the faithful, earnest and consistent friend of the grange and of the agricultural classes of the State, zealously laboring to advance every agricultural interest and to elevate the profession of agriculture to a higher standard; therefore, be it

Resolved, That the Missouri State Grange cordially indorses COLMAN'S RURAL WORLD and recommends it to the support of the Patrons of Husbandry of the State of Missouri.

Grange Lectures.

Bro. De Barnardi has the following appointments to deliver lectures in Bates Co., Mo.:

Friday, Nov. 18, Forb's School House, West Point Tp. at 2 and 7 o'clock, p, m.

Saturday, Nov. 19, Rosier, West Boone Tp. at 2 and 7 o'clock, p. m.

Monday, Nov. 21, Buck Horn School House, East Boone Tp. at 2 and 7 o'clock, p. m.

Tuesday, Nov. 22, Concord School House, Rhkart Tp. at 2 and 7 o'clock, p. m.

Wednesday, Nov. 23, Dillon School House, Mound Tp. at 2 and 7 o'clock, p. m.

Thursday, Nov. 24, Crescent Hill, Deer Creek Tp. at 2 and 7 o'clock, p. m.

Friday, Nov. 25, Hackler School House, Mingo Tp. at 2 and 7 o'clock, p. m.

Saturday, Nov. 26, Altona, Grand River Tp. at 2 and 7 o'clock, p. m.

Monday, Nov. 28, Harmony School House, Shawnee Tp. at 2 and 7 o'clock, p. m.

Tuesday, Nov. 29 Fairview School House, Spruce Tp. at 2 and 7 o'clock, p. m.

Wednesday, Nov. 30, Juniper School House Deep Water, Tp. at 2 and 7 o'clock, p. m.

Thursday, Dec. 1, Black's School House, Summit Tp. at 2 and 7 o'clock, p. m.

Friday, Dec. 2, Roger's School House, Pleasant Gap Tp. at 2 and 7 o'clock, p. m.

Saturday, Dec. 3, Lone Oak Hall, Lone Oak Tp. at 2 and 7 o'clock, p. m.

Monday, Dec. 5, New Home, New Home Tp. at 2 and 7 o'clock, p. m.

Tuesday, Dec. 6, Walnut, Walnut Tp. at 2 and 7 o'clock, p. m.

Wednesday, Dec. 7, Hume, Howard Tp. at 2 and 7 o'clock, p. m.

Thursday, Dec. 8, Fairview School House, Osage Tp. at 2 and 7 o'clock, p. m.

Friday, Dec. 9, Papinville, Prairie Tp. at 2 and 7 o'clock, p. m.

Saturday, Dec. 10, Rockville, at 2 p. m., Hayne's School House, Hudson Tp. at 7 p. m.

Monday, Dec. 11, Baptist Church, Hudson Tp. at 2 p. m., and at town of Hudson at 7 p. m.

By order Bates Co. Grange Executive Com. J. P. CRUSON, Chairman.

Adulterations.

We hear much these days about the adulteration of food, and yet how few have an idea of the extent to which adulterations are carried, and the sickness and suffering caused by them.

The importance of the subject is second to no other demanding the attention of our Order. Poison stares us in the face everywhere. We eat it; we drink it; we wear it about our necks and in our clothing; we feed it to our children and give it to them to play with; we decorate our rooms with it; mix it with our candies; wrap our confectioneries in it, and so on, *ad infinitum*.

Grangers should agitate this subject. They should demand food and drink absolutely pure, and they should purchase from none but reliable dealers, who will guarantee the purity of the articles they sell. They should press the matter upon our State legislatures, and urge the enactment of laws looking to a thorough investigation of the poisonous adulteration of food and the admixture of injurious compounds with the essentials of life; and summary punishment of all who make or sell it.

These laws should be particularly stringent against the manufacturers of adulterated food, for they are really the only ones who profit by the nefarious business. None who know the extent to which poisonous and the most vile ingredients are mixed with articles of food, or substituted for them, and the amount of sickness and suffering produced by them, will for a moment doubt the necessity of the law-making power in every state in the Union furnishing relief by suitable legislation.

An eminent physician who has given much time to the investigation of this subject, says: "It is possible that the adulteration of sugars and syrups, and their use by the consumers, is causing more deaths throughout the country, especially of those known as sudden deaths, than smallpox."

Many of the European governments exercise restrictive measures, and all suspicious articles of food are analyzed. Great Britain has a law requiring that teas imported into her dominions shall be inspected, and those adulterated shall be destroyed. Last year 7,000 chests were burned in British India. In 1879 she had 16,722 samples of food analyzed, and 2,978 of them—nearly 18 per cent—were adulterated. In 1878 Germany had 261,478 samples of different articles analyzed and obtained 3,352 convictions. Tea was found to be adulterated with chromate of lead, Prussian blue, and prussic acid; and roasted acorns, lampblack, logwood, mahogany, baked liver, and many other articles were found in browned and ground coffees.

It is claimed by physicians who have investigated, that seven-eighths of all the sugar sold in Chicago is glucose, made from corn starch and oil of vitriol. Nearly all the white sugars are full of acids and such active poisons, as chloride of tin and chloride of calcium are frequently found in them, and these and iron and magnesia are often found in syrups in poisonous quantities.

Terra alba—white clay—is extensively used in the manufacture of candy and other confectioneries; and cream of tartar has been adulterated with it to the extent of seventy-five per cent.

Confectioneries are often made of glucose, and arsenic, red lead, copper, vermillion, and other poisonous substances are used in their manufacture.

Alum and sulphate of copper may be found in bread. Baking-powders are adulterated with terra alba, kaolin, plaster of paris, whiting and alum. Cheese is vitiated with potatoes, beans, red chalk, vermillion, oleomargarine, arsenic. Jellies and fruits are colored with aniline to deceive the public and sell inferior goods.

This list might be extended through nearly the entire catalogue of eatables. Is it any wonder the stomachs of a large majority of the people of this country are soon worn out, eaten up, and heartburn, indigestion and dyspepsia are prevalent everywhere?—Live Patron.

Parties and the Railroad Question.

It is a significant recognition of the demands of public sentiment that both political parties in their recent conventions were constrained to declare themselves in favor of the regulation and supervision of railroad transportation by authority of the state. The last resolution of the Republican platform, as reported by the committee, was somewhat vague and equivocal in declaring opposition to "all monopolies that oppress the people or unfairly discriminate against local interests." This is a statement from which no one can consent without acknowledging himself in favor of oppression and injustice, though it seems at the first glance to have some positive virtue in it. It would certainly be a very bold and reckless political party that would openly declare itself in favor of anything that oppressed the people or discriminated "unfairly" against anybody. But a vigilant delegate who believed in declarations on practical questions which mean something, proposed a resolution in favor of a "Railroad Commission to represent, within proper limits, the state of New York in its dealings with railroads and to protect the interests of the people of this state as affected by them." This was added to the platform, and distinctly pledges the Republican party to the policy of state supervision. The unfaithfulness of its representatives in the last Senate gave the Democrats an opportunity to denounce the party itself and to declare it responsible for the defeat of "every measure of transportation reform." It can not afford to tolerate any further exhibition of such unfaithfulness. In point of fact, the party was in favor of the reform, and the efforts made to promote it came chiefly from the Republicans in the legislature. While the Democrats now put forth claims of superior virtue, they have made no record on the subject as a party and given no evidence that they would have done anything if the majority had been on their side.

Democratic interest in this subject is of recent date. Since the Anti-Monopoly League began its agitation certain men with a turn for demagoguery have conceived the idea that there might be political capital in opposition to "monopolies" and "moneyed corporations." John Kelly was one of the first to meet the advances of Mr. Thurber, and he promptly pledged Tammany Hall to the cause of "anti-monopoly" in the hope thereby of catching the breeze of popular favor. The same spirit showed itself in the State Convention at Albany. The temporary chairman in his remarkable oratorical effort reminded the delegates of their duty to declare "unswerving opposition to monopolies of every kind, which are fast usurping the rights and prerogatives of the people." The platform pledged the party to the "adoption of measures to restrict the growing power of such monopolies." What these measures should be is indicated in the statements that the monopolies—railroad corporations being apparently meant thereby—"should be subject to the supervision of commissioners established by public authority;" and that "unjust discriminations in the transportation of passengers and merchandise should be prohibited." Thus we have both parties pledged to the establishment of a Railroad Commission, and, either expressly or by implication, to the prohibition of such discriminations as work injustice to the individuals or communities. This covers substantially the railroad policy for which we have been contending so long.

But in the declarations of the Democratic Convention and of "anti-monopolist" generally there is a tone and spirit that savors too much of demagogueism. As we have heretofore pointed out, the word "monopoly" is used overmuch and in a misleading sense. While railroads are necessarily in the position of enjoying certain special privileges that carry responsibilities to the public with them, and while the circumstances and conditions of their business make them in a measure free from the pressure of competition, they are no proper sense monopolies, nor should they be the objects of popular hostility. Their privileges are necessary to the successful prosecution of their business, which is one of vast importance to the public. They should be held to their responsibilities and be compelled to recognize the principles of equity which it is the function of the state to enforce in behalf of its citizens, but no policy should be adopted which is calculated to cripple them or interfere with that freedom of management which is essential to the successful conduct of business. It is "from the purpose" to denounce corporations, "moneyed" or otherwise. The aggregation of capital by means of chartered associations is necessary to the successful prosecution of the great enterprise of modern industry. They serve a beneficient purpose, and should not be restricted in the legitimate use of their powers, though they should be prevented from abusing them.

The somewhat intemperate and ill-considered language of so-called anti-monopolists has threatened to compromise the cause of rational transportation reform. The defenders of the railroads have been assuming that the object was to regulate modes of doing business, to limit charges, and to substitute the authority of the state and the fixed requirements of law for the discretion of managers and the liberty of conforming the conduct of business to exigencies as they arise. What is really proposed as active measures is the establishment in the state and in the nation of commissions whose function shall be to supervise the working of railroads and secure the enforcement of laws relating to them and the prevention of such discriminations as favor one man or one locality at the expense of another and work practical injustice among the people. Precisely what and how much legislation is needed can only be known after a beginning has been made and the proper agency is set at work for bringing the great system of railroad transportation into practical relations with the state. What the beginning should be is pretty clear, and it is only by taking the first steps that we shall be able to see our way to the next. First of all we should have the official connection between public authority and the railroads established by means of commissions, and these should be made an effective agency for preparing the way to a definite and settled policy adapted to secure all the rights and interests of the public without interfering with those which justly belong to railroad corporations.—New York Times.

A Friendly Game.

"Say, mister!" said a tall, sunburned man with a wide brimmed hat, as he edged his way into the managing editor's room yesterday afternoon. "Say, mister, do you know anything about keards?"

"Why, yes," responded the editor, "I know how to play 'everlasting' and 'old maid' and things of that kind; why?"

"That's just what I want to ask about. Now in playing 'old maid,' suppose the man who holds the age antes, and passes on the draw, who's bet is it?"

"That isn't the way I play it," said the editor. "In my game the player who has a queen after the other cards are played is the 'old maid.'"

"Perhaps it's 'everlasting' that I'm thinking of," mused the stranger. "Suppose in 'everlasting' you should catch an old maid on the draw and when the rest of the keards was played you found you hadn't filled. What then?"

"I don't see how that question could arise in that game," said the editor. "Maybe you are talking of the game called 'poker.'"

"'Poker'! what's that?" asked the stranger, looking up in innocent surprise.

"That's where they have ages and fulls and that sort of thing."

"Do you know how to play it, stranger?" asked the tall man, drawing out a pack of cards. "Will you show me how?"

The editor ran over the cards and dealt two hands rapidly.

"Now," he explained, "two pairs beat one pair, three of a kind beat two pairs, a flush beats threes and four of a kind beat a flush. What have you got?"

The stranger laid down a mixed hand and the editor explained that it was worthless, as his own hand held a pair.

"Lemme deal 'em once," said the stranger, running them off clumsily. "Five each?"

"Yes," replied the editor, seeing that he had gotten hold of a sharper and making up his mind to teach him a lesson. "Five each."

"Now what do we do?" asked the sharper.

"If we were betting, I'd have to ante a dollar and you'd cover it with two. Then if I wanted to come in I'd plank another dollar, and then——."

"Hold on! hold on! don't go so fast. You put up two dollars at different times and I put up two all at once. That it?"

"Yes, and then we draw."

"Let's try it, once for fun, if you don't mind," said the sharper with unnatural eagerness.

"All right," smiled the editor, and he threw two dollars on the table, which were promptly covered.

"Now you say we draw. How many do we take?"

"You may take what you like, I don't want any," replied the editor. "I stand pat."

"Then I take one keard. Do we bet now?"

"Yes."

The stranger bet cautiously, and the editor raised him, and was seen until there were fifteen dollars wagered, though there was no money up, beyond the ante.

"I reckon I won't bet any more," said the stranger timidly—"who beats?" and he laid down four aces.

"I beat you," said the managing editor, and he laid down a straight flush. "You owe me fifteen dollars."

The stranger looked at the cards some time, and then dashed his fist on the table.

"You played fair, did ye?"

"I did," replied the editor.

Slowly the stranger pulled out a greasy wallet and laid down a twenty dollar bill.

The editor gave him the change, and the man went out, still running over the cards and wondering how it happened.

"I thought he was a sharp and he is only a flat," said the editor, explaining the circumstance later to the cashier, as he handed in the twenty for change.

"Like to oblige you, old boy," smiled the cashier, "but that twenty is a counterfeit!"

Parties having business with the managing editor for a week or two will please come armed.—The Brooklyn Daily Eagle.

Horticultural.

Fruit Raising in Texas.

Mr. R. B. Swann, in his communication of July 15, has, by the use of a word of three letters, where he should have used one of four, done great injustice to a large slice of the great State of Texas. He says, "with the exception of peaches, figs and blackberries no fruits do well in any portion of the State." If he had used this instead of any, his statement would have been undoubtedly correct. I am sure Mr. S. has never been in Anderson, Smith or Cherokee counties, or he never would have made such a statement.

The first black-cap raspberries in the St. Louis market in 1879 were grown near Palestine, Anderson county, and the bushes were heavily loaded with fruit. There are several men in the same vicinity who cultivate quite large tracts of land in strawberries. They must make it pay, for they set out larger plantations every year. As fine pears as I ever saw grow there, equal in size and beauty to the Californian; quinces also do well. In 1877 and 1878 an apple orchard, eight years after being set out, bore heavy crops of large apples; although not as good as those raised further north, they were far ahead of dried apples for sauce or pies. The Chickasaw, Wild Goose and other plums do well; the Chickasaw growing almost wild about the older settled fields, in thickets of a quarter of an acre or more in extent, and yielding immense crops, which sold at Palestine in 1879 for from $1 to $1.50 per bushel. They were shipped, with peaches, to Houston and Galveston.

I believe the soil and climate of Texas, east of the Trinity river and south of the T. & P. railroad to be equal to any for nearly all the fruits, berries and vegetables of the temperate zone. It is not the fault of the soil or climate that such things have been neglected, but the mistaken idea that it is beneath the dignity of a white man to have anything to sell except cotton and live stock. But that time is rapidly passing away and better times dawning. I came to Texas five years ago, from western Connecticut, and can see a vast improvement in that short time in the people of Texas. They have more and better tools, ride in better wagons, live in better houses, and are making slow but sure progress. I lived in Anderson county nearly three years, and have been in Blanco ever since, east Texas is a good country if a person has no fear of malaria, but I think the mountains of west Texas are the best, especially for people from New England and the middle States. There is absolutely no malaria in this country.

The farmers have harvested a good crop of wheat, but corn will be short on account of frost in April and dry weather in June.—H. C. W., in Home and Farm.

Some Facts About Onions.

An intelligent correspondent, J. J. McRae, writing from Mississippi, says the Home and Farm, comes to us for information respecting the growing of a crop of onions, and propounds the following questions: At what time should I plant onions for early market? How plant, in drills or sow broadcast? Which plant, seeds or buttons? Which is the best kind for this climate? How cultivate? We shall proceed to answer the questions without much attention to the order in which they are set down, but hope to reply to every one of them before we are through.

It is a curious circumstance that, though onions are among the cultivated crops of greatest antiquity, as they are one of the most nutritious and healthy of vegetables, and we may add, one of the surest and easier grown, and that over a wide range of latitude, still their cultivation for general consumption outside of where they are made a special crop is confined to a few and to narrow sections. Thus, Danvers, Mass., Wethersfield, Conn., Bearea, O., Davanport, Iowa, and Calumet, near Chicago, are and have been celebrated for the production of onions, as well as many other sections not necessary to mention. But there must be a reason why a vegetable so genarally relished as the onion, is not almost as widely cultivated as the tomato or the potato, and we conclude that reason to be in that it requires a peculiar handling of the soil and demanded by common vegetable crops. Like wheat, the sweet potato and round turnips, the onion demands a seed bed of not more than three inches in depth, but below that a clean and compacted substratum of earth, which, while it is not so hard as to prevent the penetration of the small roots of these plants, resists the entrance of large on Perhaps the best of all natural so for onions and we may add also, for wh at, sweet potatoes and common round rnips, would be a piece of fresh prairie n which the sod had been removed to depth of four or five inches, dried, rned and the ashes returned, and the after the surface fined to the depth of hree inches, and the seed sown. Und such circumstances we know whea makes the best crop, and we kno too, when onions, sweet potatoes and rnips have a rich and mellow soil for eir roots to penetrate into, there is a odigious growth of stalk and vine, but ch a division of the roots that satisfac y bulbs or tubers are not produce And this is probably the secret whi seems to be confined to narrow neigh hoods.

Our correspondent will ow be able to perceive that to make a cess with onions he should have plow his land some time last spring or ing the summer months, and had the relimi nary work done, so he could pr e the seed-bed by adding to it cotton- and cotton-seed meal each at the e of from 400 to 500 pounds per acre and then harrow them in with a toothed harrow, so the tilth would fine and perfect. For a spring cr in his latitude he should sow as soon the buds begin to start in February, drills from fifteen to eighteen inch apart, five pounds of seed per acre of the best northern-grown, procured from some trustworthy nurseryman like Jas. J. H. Gregory, of Marblehead, Mass., or B. K. Bliss & Sons, of New York. One pound of seed, the Calumet men say, will produce, when rightly handled, one hundred bushels of onions; and the common yield of an acre well cared for often amounts to 500 bushels marketable bulbs. But from the start of the plants in the spring they have to be hand-weeded at first, and every foreign growth removed by the fingers; and subsequently, when they are three inches high, they must be thinned to stand three inches apart and no more. During the growing season they are hand-hoed weekly, but the earth is never stirred deeply, the aim of the cultivator being to prevent the loosening of the soil to a depth beyond three inches, and in that way prevent a division of the roots and help the formation of the bulb at the surface. As the bulbs gain size the tops gradually die down, and early sowings ripen in the north from some time in July to late in August, the seeding having taken place sometimes in March, but oftener in April.

In the south it is a common practice to sow onions in the fall, and in that case the work should be done so as to give six weeks growth to the young plants before witer sets in. Therefore, they may be sown in September, October or November, according to latitude; but just before winter sets in they should be covered with a light coating of hay or straw, for though in some measurse frost proof, young onions will not stand severe cold without serious injury. But whether sown in the spring or fall, we assure our correspondent he will meet with small success unless he is careful to prepare his land after the manner we have directed. Once prepared, an onion patch may remain there for half a century, and with advantage to the crop. In proof of this, not long since the writer was shown a field in onions close by the new town of Pullman, a suburb of Chicago, which has been cultivated in onions for forty years, or since the settlement of that section by a body of emigrants from Holland. And what seemed singular, no manure had been put on the land for twenty years, though a part of the explanation may be that for the previous twenty, lavish applications were made.

In regard to planting seeds or sets, in the absence of accurate information as to our correspondent's soil, situation and surrounding circumstances, we should advise seed, since it will be found much less expensive in the end, and much more satisfactory to have made a crop from first to last. For the warm climate and early season of Mississippi, the mild and large Italian varieties might do well; but since only certain kinds are generally known in the average markets of the country, the common varieties would be best. These are the Wethersfield Red, the Danvers Yellow, the Yellow Dutch, the Silver Skin and others. Write to either of the nurserymen named above for the benefit of their experience as to what variety would suit your soil and circumstances best. Good onion seed is a scarce and dear article, and you may have to pay from $3 to $6 a pound.

And now in conclusion we must not forget to add that southern grown onions are not only more tender and nutritious than northern, but they are less rank in flavor and are always preferred by intelligent consumers. This year up to the middle of July the entire north was largely supplied by onions fetched from the distance which sold at 5 cents per pound. During the time, however, a few were brought up from the Gulf States, of which growing the farmers and gardeners there ought to have and keep a monopoly as much as of early strawberries or any other fruits or vegetables.

Revised Fruit List.

Since the last publication of our fruit list, we have, for satisfactory reasons, changed our opinion with respect to a few of the fruits which it contained. But in regard to the list as a whole we can see no just grounds for disturbing it. Indeed we do not see how it can be improved for this section of the country, or as a general list for all the middle States. Some of each of the separate selections may not do well upon one premises that will succeed admirably on another. Each grower must find out for himself the particular apples, pears, &c., especially adapted to his soil and location. This can easily be done by inquiries of those who are successful fruit growers, whose soil is somewhat similar to their own.

According to our present preference, we should select the following for our own planting, all of which we are now growing more or less successfully:

Standard Pears.—1. Giffard; 2. Doyenne d'Ete; 3. Early Catherine; 4. Kirtland; 5. Bloodgood; 6. Summer Julienne; 7. Tyson; 8 Brandywine; 9. Bartlett; 10. Belle Lucrative; 11. Manning's Elizabeth; 12. Seckel; 13. Howell; 14. Anjou; 15. Sheldon; 16. St. Ghislan; 17. Lawrence; 18. Reading. For those who may desire a smaller number, we should select: 1. Giffard; 2. Early Catherine; 3. Bloodgood; 4. Tyson; 5. Bartlett; 6. Belle Lucrative; 7. Seckel; 8. Lawrence; 9. Reading. They ripen in about the order they are arranged. In the above list, from No. 1 to 8 are summer varieties; from 9 to 16 autumn (early and late); and 17 and 18 winter, thus affording a sufficient number for each of the periods of the best known sorts for this region.

Dwarf Pears.—1. St. Michael d'Archangel; 2. Bartlett; 3. Comice; 4. Rostiezer; 5. Diel; 6. Tyson; 7. Belle Lucrative; 8. Lawrence; 9. Ott; 10. Louise Bonne; 11. Bosc; 12. Boussock; 13. Glout Morceau.

Apples.—1. Maiden's Blush; 2. Baldwin; 3. Smokehouse; 4. Northern Spy; 5. Smith's Cidier; 6. Fallawater; 7. Cornell's Fancy; 8. Red Astrachan; 9. Wagner; 10. Porter; 11. Gravenstein; 12. Tompkins' King; 13. Roxbury Russet. We add to the foregoing list the Tompkins' King and Roxbury Russet, both most excellent varieties; indeed the King is regarded by some as unsurpassed. Northern Spy is also restored.

Peaches.—1. Crawford's Early; 2. Hale's Early; 3. York's Early; 4. Old Mixon; 5. Crawford's Late; 6. Ward's Late; 7. Smock's Late; 8. Susquehanna. There is no solid reason to change this list so far as it goes. We suggested peach growers to favor us with a list of their own, and a few did, but where they differed from ours we did not deem an improvement.

Grapes.—1. Telegraph; 2. Concord; 3. Hartford; 4. Clinton; 5. Salem; 6. Rogers' No. 32; 7. Brighton. We have added to the list No. 32, which, should it maintain its present character, will be the very best out-door variety cultivated. It is a beautiful pink, or rather maroon colored grape, and at times is transparent. It bears regular crops yearly with us. Clinton, in the foregoing list, is only for wine, and is probably the very best for that purpose. We also add the Brighton, a maroon color, as promising well. It is, however, a small berry and rather straggling branches, but almost pulpless, and of excellent quality. The Prentiss is another new grape, somewhat larger than the Delaware, of good quality and scarcely a preceptible pulp. It promises to take the lead of all the white varieties. The bunches are compact and of fair size. We have not tried it.

Cherries.—1. May Bigarreau; 2. Belle de Choisy; 3. Black Tartarian; 4. Black Eagle; 5. Black Hawk; 6. Elton; 7. Downer's Late; 8. Early Richmond; 9. Early Purple Guigne; 10. Del. Bleeding Heart. The ripening of the list will range from the earliest to the latest, thus carrying one through the whole cherry season. No one can go amiss in adopting the list.

Raspberries.—1. Hornet; 2. Herstine; 3. Philadelphia; 4. Brandywine.

Strawberries.—1. Captain Jack; 2. Seth Boyden; 3. Sharpless: 4. Triomphe de Gand.

Currants.—I. Black Naples; 2. Red Dutch; 3. White Grape. These varieties are the best among the different colors. The Red Dutch is a regular bearer and is of better quality than any other. There are others larger, but they are more acid. The White Grape is transparent, of good quality, and ought to be generally grown, but is not a great bearer.

Gooseberries.—1. Houghton; 2. Downing. These are the two best gooseberries grown in this country. They bear every year heavy crops, are free from mildew, and are of excellent quality. They are large enough for all practical purposes. Keep clear of the giants and their prices, and especially of foreign varieties.—Germantown, (Penn.,) Telegraph.

To Preserve Cider.

Cider is valuable in various ways when properly prepared and kept, and the following method will be found as good as any. The juice, as it comes from the press should be filtered through straw and then put into barrels and carried into the cellar, and placed upon blocks with the bungs up. The bungs should then be removed and fermentation will soon take place. The pomace and other impurities will work out through the bung-holes. As this works out, apple juice should be added sufficient to keep the barrels full, otherwise the impurities instead of working out, will rise against the top of the barrel and remain there.

It should be looked after every day and all feculent matter removed. When it ceases to work and no more matter rises, the bungs may be driven in tight. In a few days provide clean barrels, into the bung-holes of which insert a piece of cotton cloth, about an inch and a half wide and ten inches long, six inches of which have been dipped in melted roll brimstone, set on fire, driving up the bungs of the empty barrels tight, leaving the end of the cloth on which there is no brimstone out of the hole, so that the bung will hold it tight. Next remove the bung from the empty barrel, and draw off the cider from the full barrel into it, being careful not to allow any sediment to come off. Finally, bung up the barrel, letting it remain undisturbed a few weeks, when the cider may be bottled at leisure. There are numerous methods of adding sugar, isinglass and other substances, to facilitate the preparation of cider for bottling, but the natural process, as above described, answers a good purpose.

Dutch Bulbs.

The following directions for the planting and care of bulbs are from the New England Farmer:

These bulbs are quite hardy, and, since they require some time to form new roots, and since the roots begin to grow while the weather is still quite cold, they are best planted in the fall, about the 1st of November. They will then be ready to start into rapid growth early in the spring. The bed should be well enriched with a liberal dressing of fine manure, and the bulbs planted in an inch or so below the surface, and, if very early flowers are desired, the bed should be well covered up with litter to prevent severe freezing, and this covering being raked off in March will favor an early start. In sheltered locations the snowdrop will bloom early in March, or even in February, if the weather is mild enough to thaw out the frost. Just afterwards comes the crocus; a little later the fragrant and elegant hyacinth, the graceful narcissus, and the gaudy tulip. The anemone and scilla also are very pretty, and well worth more general attention. The anemone is not very hardy, and should have a good covering of litter for the winter. Most of these bulbs are easily forced and made to flower in pots in the house in winter—the only difficulty about forcing them being the time required to start them into a vigorous growth. If they are put at once into a warm room, they make feeble growth and small flowers; but, if time is taken to get them well rooted in the low temperature of a cellar, or out of doors when the weather is not too cold, then they will come rapidly forward in a warm room, and throw out fine, large flowers. The hyacinth, the cyclamen, the scilla, and oxalis, are favorites for the window, and the crocus also is quite easily grown in pots."

KEEPING APPLES.—A correspondent last year advocated keeping apples in damp cellars, claiming that they preserve better than in dry cellars. Mr. Vick, in his last magazine, says of this matter: "The evidence is accumulating that apples keep better in moist or damp cellers than in dry ones. It is probable that this may be established as a fact. It would no doubt be a blessing to most country houses, in a sanitary point of view, if their cellars were used only for small supplies of vegetables, and that they should at all times be ventilated as well as possible. Special cellars for fruit and vegetables are in use in some parts of the country. The walls rise only a foot above the surface; they are covered with a double floor, filled in between with sawdust, and over all is a roof. If room is desirable, low walls, one story above ground, can support the roof.

Extra Hardy Apples.

We find the following in a catalogue just received from Geneva, N. Y.: In the northern portion of the United States and adjoining provinces of Canada the feeling has prevailed until recently, that nothing in the shape of apples could be grown, except crabs. While this is true as regards many of the old varieties, a few Russian apples and northern seedlings have been introduced, which, though they may require better care than that under which the crabs will thrive, have proved themselves equally hardy. In proof of this we would point to the Duchess of Oldenburgh, growing on the highlands of Oneida and Lewis counties, and in northern New Hampshire and Maine. The following list we rate as hardy as the Duchess of Oldenburgh, and consider the fruit of many of them of better quality than the Baldwin. Against each variety we give the season of ripening at the north:

Tetofsky, August; Duchess of Oldenburgh, September; Alexander, October; Peach, October and November; Aucubafolia, November and December; Clark's Orange, November to February; Plumb's Cider, November to February; Wealthy, November to February; Bethel, December to February; Haas, December to March; Rubicon, December to March; McIntosh Red, November to April; Pewaukee, January to April; Walbridge, March to June; Quince Apple, March to June.

Treatment of Shrubs and Vines.

The Country Gentleman says of the fall treatment of shrubs:

Ornamental shrubs, planted about dwellings, are often neglected year after year, and become distorted in shape and stunted in growth. They may be greatly improved by manure and pruning. The manure should be applied in autumn as a top-dressing, extending at least as far from the stem on each side as the height of the shrub. The soluble parts of the manure will soak into the ground and accelerate growth next season. The mulching effect of the fibrous parts will be useful. Next spring, before growth begins, cut back the longer shoots at a fork, taking the longer or larger portion of the branch and leaving the smaller, which will avoid any stump. Bring the shrub thus into handsome shape. If the growth is too thick anywhere, thin it out. If there are any crooked or dead branches, cut them off.

To this we add that now is the proper time to apply manure to vines as well. A thick coating of well-rotted manure to a vineyard will add largely to the yield next season, increasing the size of bushes wonderfully. Manure should also be spread among currant, raspberry and gooseberry bushes, and the pruning out of superfluous or dead wood may be done at any time.—Ex.

Curculio in Plum Culture.

Mr. Isaac Kauffman, Mountville, Penn., is reported, in the Lancaster Examiner, as having two plum trees of the same variety and apparently equal vigor, one of which bore nothing this year while the other was abundantly loaded with fruit in consequence of having been "shaken every morning for ten days while in blossom." Experienced plum-growers well know that merely shaking the trees with no effort to destroy the curculio as they are thus felled to the ground will do no possible good. Even if the weevils are destroyed either by chickens kept on a cooped under the trees, or by catchind on a sheet and destroying them, the work must be continued not merely ten days, but for five or six weeks, so long, in fact, as the curculio are caught. Apropos to the above is a remark made to me a few days since by Judge Ramsdell, the most extensive and successful plum-grower in Michigan. He said that the curculio was an advantage to him, as in bearing years they would so thin out the plums, as to make his crop far more valuable, and by carefully gathering all the wormy fruit in such seasons, as soon as it fell, and burning it, he so thinned the insects that the expense of fighting them during the off-year, and saving the small crop, was quite light. He placed great stress on the importance of gathering and destroying all the wormy fruit as fast as it fell from the tree.—Prof. Cook.

TREATMENT OF SHRUBS.—Ornamental shrubs, planted about dwellings, are often neglected year after year, and become distorted in shape and stunted in growth. They may be greatly improved by manure and pruning. The manure should be applied in autumn as a top-dressing, extending at least as far from the stem on each side as the height of the shrub. The soluble parts of the manure will soak into the ground and accelerate growth next season. The mulching effect of the fibrous parts will be useful. Next spring, before growth begins, cut back the longer shoots at a fork, taking the longer or larger portion of the branch and leaving the smaller, which will avoid any stump. Bring the shrub thus into handsome shape. If the growth is too thick anywhere, thin it out. If there are any dead shoots or branches, cut them off.

ASHES FOR FRUIT TREES.—When apple or pear trees become diseased from being planted in unfavorable or ill-prepared soil, or from lack of food, they are very apt to be attacked by insects, which, if in healthy condition would probably be unknown. Certain washes, such as lye (a solution of potash), have been applied with success in destroying the insects and restoring the tree to health. But for our own practice, we have, for the last two years, applied a much simpler remedy with more success, as it causes the old dead bark, the chosen hiding-place of the insects, to cleave off, leaving in its place a smooth, healthy surface. This is simply, after a rain and while the bark is yet wet, to throw on dry wood ashes until the power of retention is full. If rain soon follows, the strength of the ashes is carried into every cranny of the old bark, and the effect is, working cleanliness on the tree. If there is no rain, the ashes will remain and be working their good effects, and be ready for action when the rain comes. The operation of thowing on the ashes is easily and quickly performed; if the tree is in a bad condition it is easily repeated until the insects are all destroyed, and a new, healthy bark covers the tree. Insects' eggs will never hatch under the influence of ashes. Two objects are gained by this operation—the ashes furnish food for the tree as well as destroy its enemies, and impart cleanliness to the tree.

Horticultural Notes.

Winter celery, kept till spring, is best of all, as other vegetables are scarce. It is best saved in a cellar, where it may be banked up in earth, in the bottom, or it may be placed in boxes made nearly water tight, to keep it in good condition and growing, so it will be crisp and brittle, not tough and wilted.

When enriching the soil so as to procure a good crop of corn and potatoes, do not forget to apply a liberal dressing to the too often neglected orchard. Rotation of crops cannot be followed with fruit trees, hence the greater necessity of systematically restoring to the soil so far as may be done, these elements consumed in the production of a crop of fruit.

All bulbs and plants that die down to the ground in autumn may be protected by covering the surface of the earth with leaves, manure or straw, but plants that retain their leaves during winter will not bear this kind of protection. A few evergreen boughs thrown over the bed, a little salt between the plants, or some light, open covering of this kind, is all they will bear without danger of smothering and rotting.

Peach pits are best planted now while they are fresh. They may be planted in rows in good mellow soil about a foot apart, and the soil covered with coarse litter. This should be removed in the spring; the young trees can be transplanted with a garden trowel without disturbing them when a month old. Some kinds of peaches reproduce themselves true from seed, but it is quite probable that some good kinds may be procured, although they may vary from the parent kind from which the seed has been taken.

The London Garden declares its determination to use English words in naming plants. It will be a decided improvement, especially when proper names are introduced. Why should we not say Drummond Phlox instead of Phlox Drummondii? And why should a pretty Chinese pink be smothered under such a name as Dianthus Heddewigii diadematus flore-plenus? If the name of the originator must be used, let it be in English form and with English qualifying terms. Heddewig's Diamond Pink would certainly answer the purpose quite as well as the Latin lingo.

Mr. Meehan says that he is glad that the practice of washing the trunks of trees is increasing. The way to apply the wash is thus described: Keep the trunks and larger limbs of all fruit trees clean and healthy by a wash composed of one part sulphur fine as a powder, two parts soft soap, one part salt, all reduced by water to the consistency of whitewash, and to every bucket or three gallons, add a half pint of coal oil The latter is considered to be an effectual remedy against the borer, curculio, and a preventive for all insects. Apply with a whitewash brush or mop of rags or sheepskins.

Sometimes fruit trees are unproductive from other causes than poverty of the soil or neglect of the orchardist. They often grow too luxuriantly to bear well. In this case root-pruning is very effectual, and is performed by digging a circle around the tree, with the circle made close to the trunk of the tree. A fifteen year-old tree, for instance, may be encircled at five feet from the trunk. No rule can be laid down for this; judgment must be exercised. If cut too close, the tree may be stunted for years, and if too far, it will not be effective. The aim should be to reduce the roots about one-third.

I am very fond of roses and raise a great many from slips. I do not have any hotbeds or cold-frames, or other conveniences of similar kind. I simply stick my slips as I cut them in good garden soil where I expect my rose bushes to stand. Over each slip I turn a glass fruit jar, which remains all winter. As cold weather approaches, I draw the earth up around the jar a little for protection. My slips, set down in this way, rarely fail to succeed. I began to put them down last month, and shall continue to do so until about the first of September. I will add in conclusion, that I keep on hand a solution of whale oil soap to sprinkle over my rose bushes whenever infested with any insect pest, and have found it efficacious in all cases. One pound of the soap is sufficient for eight gallons of water.

The Apiary.

Extracted vs. Comb Honey.

As to which kind is the most profitable to produce, Mr. Dougherty, in the Indiana Farmer, remarks as follows, and at the same time indorses the views of the Bee Journal. He says:

As to which kind will pay the best, depends upon how it is to be sold, wholesale or retail, distance from the market, etc. You can produce one-third more, good, well ripened extracted, than you can of comb honey, and when you have a good home market, at retail, extracted honey will bring within a few cents as much per pound as comb honey. Where honey has to be shipped long distances, extracted honey will undoubtedly pay the best. The freight is cheaper. The loss from leakage is much less. Extracted honey is growing very rapidly, and in the near future, comb honey will be in little demand. In creating a home demand, it is well to produce both kinds, and as the trade increases, supply that which gives the best satisfaction. In producing extracted honey, caution is necessary in not extracting unripe honey, and in extracting so much as to rob the bees of necessary stores. Some bee keepers practice extracting the honey as fast as it is gathered, but honey in this condition lacks the fine flavor that belongs to a good article of extracted honey, and is liable to ferment and sour. None but a thoroughly good article should be produced and placed on the market, as the price will depend upon the quality you offer. You should only produce extracted honey that is equal to the very best article of comb honey. It is but little trouble to secure a crop of honey, when the extractor is judiciously used, during an ordinary honey yield, whereas at times it is almost impossible to make the bees work in the surplus boxes.

Bee Notes.

Every family who have a home, and keep house should have a few hives of bees. Nothing of so little cost will yield greater profit. Nothing is nicer and more healthy than a dish of honey on the table at meal time. It is a luxury and a substantial, and may and should be found at every farm house, especially.

Everybody knows that hornets, wasps, yellow jackets and all the varrieties of wild bees may be incased in frost and ice for months, and as soon as warmed and dried will be as active as ever. But the honey bee is not so constituted. Her blood is warm, and her system must be supplied with food to sustain life; yet during winter she lies in a semi-torpid condition, and may even seem to be dead, and yet be restored.

Bees have done usually well in Colorado this year. First class native honey can be had for 25 cents per pound. The dry atmosphere and the great amount of flowers in Colorado, make this a profitable State for bee-keepers, and we wonder that more people do not engage in bee culture and the production of honey. One hundred pounds of honey brings about twenty dollars in the market—equal to an acre of wheat, ordinary seasons.

List of honey producing trees and plants in their time of flowering. First the crocus; bulbs to be planted in the fall; flowers in the spring before the snow is gone. Willow, wild and golden; very productive of honey and pollen. Plum, wild and common. Cherry of all kinds. Apple and pear, very productive of honey. Barberry, a hedge plant with fruit. Raspberry of all kinds. White and Alsike clover, the great honey producing plants. Prairie climbing rose, single, very productive of pollen and fragrant honey. Spider wort a hardy periennial, flowers all the season. Phacelia a pretty little annual. Basswood a very fine tree for street planting on wet soils. Cucumbers and all of the squash tribe. Buckwheat last but not least.

Horticultural.

Fruit Raising in Texas.

Mr. R. B. Swann, in his communication of July 15, has, by the use of a word of three letters, where he should have used one of four, done great injustice to a large slice of the great State of Texas. He says, "with the exception of peaches, figs and blackberries no fruits do well in any portion of the State." If he had used this instead of any, his statement would have been undoubtedly correct. I am sure Mr. S. has never been in Anderson, Smith or Cherokee counties, or he never would have made such a statement.

The first black-cap raspberries in the St. Louis market in 1879 were grown near Palestine, Anderson county, and the bushes were heavily loaded with fruit. There are several men in the same vicinity who cultivate quite large tracts of land in strawberries. They must make it pay, for they set out larger plantations every year. As fine pears as I ever saw grow there, equal in size and beauty to the Californian; quinces also do well. In 1877 and 1878 an apple orchard, eight years after being set out, bore heavy crops of large apples; although not as good as those raised further north, they were far ahead of dried apples for sauce or pies. The Chickasaw, Wild Goose and other plums do well; the Chickasaw growing almost wild about the older settled fields, in thickets of a quarter of an acre or more in extent, and yielding immense crops, which sold at Palestine in 1879 for from $1 to $1.50 per bushel. They were shipped, with peaches, to Houston and Galveston.

I believe the soil and climate of Texas, east of the Trinity river and south of the T. & P. railroad to be equal to any for nearly all the fruits, berries and vegetables of the temperate zone. It is not the fault of the soil or climate that such things have been neglected, but the mistaken idea that it is beneath the dignity of a white man to have anything to sell except cotton and live stock. But that time is rapidly passing away and better times dawning. I came to Texas five years ago, from western Connecticut, and can see a vast improvement in that short time in the people of Texas. They have more and better tools, ride in better wagons, live in better houses, and are making slow but sure progress. I lived in Anderson county nearly three years, and have been in Blanco ever since, east Texas is a good country if a person has no fear of malaria, but I think the mountains of west Texas are the best, especially for people from New England and the middle States. There is absolutely no malaria in this country.

The farmers have harvested a good crop of wheat, but corn will be short on account of frost in April and dry weather in June.—H. C. W., in Home and Farm.

Some Facts About Onions.

An intelligent correspondent, J. J. McRae, writing from Mississippi, says the Home and Farm, comes to us for information respecting the growing of a crop of onions, and propounds the following questions: At what time should I plant onions for early market? How plant, in drills or sow broadcast? Which plant, seeds or buttons? Which is the best kind for this climate? How cultivate? We shall preceed to answer the questions without much attention to the order in which they are set down, but hope to reply to every one of them before we are through.

It is a curious circumstance that, though onions are among the cultivated crops of greatest antiquity, as they are one of the most nutritious and healthy of vegetables, and we may add, one of the surest and easier grown, and that over a wide range of latitude, still their cultivation for general consumption outside of where they are made a special crop is confined to a few and to narrow sections. Thus, Danvers, Mass., Wethersfield, Conn., Bearea, O., Davanport, Iowa, and Calumet, near Chicago, are and have been celebrated for the production of onions, as well as many other sections not necessary to mention. But there must be a reason why a vegetable so genarally relished as the onion, is not almost as widely cultivated as the tomato or the potato, and we conclude that reason to be in that it requires a peculiar handling of the soil not demanded by common vegetable crops. Like wheat, the sweet potato and round turnips, the onion demands a seed bed of not more than three inches in depth, but below that a clean and compacted substratum of earth, which, while it is not so hard as to prevent the penetration of the small roots of these plants, resists the entrance of large ones. Perhaps the best of all natural soils for onions and we may add also, for wheat, sweet potatoes and common round turnips, would be a piece of fresh prairie on which the sod had been removed to the depth of four or five inches, dried, burned and the ashes returned, and thereafter the surface fined to the depth of three inches, and the seed sown. Under such circumstances we know wheat makes the best crop, and we know, too, when onions, sweet potatoes and turnips have a rich and mellow soil for their roots to penetrate into, there is a prodigious growth of stalk and vine, but such a division of the roots that satisfactory bulbs or tubers are not produced. And this is probably the secret which seems to be confined to narrow neighborhoods.

Our correspondent will now be able to perceive that to make a success with onions he should have plowed his land some time last spring or during the summer months, and had the preliminary work done, so he could prepare the seed-bed by adding to it cotton-hull ash and cotton-seed meal each at the rate of from 400 to 500 pounds per acre, and then harrow them in with a sharp-toothed harrow, so the tilth would be fine and perfect. For a spring crop in his latitude he should sow as soon as the buds begin to start in February, in drills from fifteen to eighteen inches apart, five pounds of seed per acre of the best northern-grown, procured from some trustworthy nurseryman like Jas. J. H. Gregory, of Marblehead, Mass., or B. K. Bliss & Sons, of New York. One pound of seed, the Calumet men say, will produce, when rightly handled, one hundred bushels of onions; and the common yield of an acre well cared for often amounts to 500 bushels marketable bulbs. But from the start of the plants in the spring they have to be hand-weeded at first, and every foreign growth removed by the fingers; and subsequently, when they are three inches high, they must be thinned to stand three inches apart and no more. During the growing season they are hand-hoed weekly, but the earth is never stirred deeply, the aim of the cultivator being to prevent the loosening of the soil to a depth beyond three inches, and in that way prevent a division of the roots and help the formation of the bulb at the surface. As the bulbs gain size the tops gradually die down, and early sowings ripen in the north from some time in July to late in August, the seeding having taken place sometimes in March, but oftener in April.

In the south it is a common practice to sow onions in the fall, and in that case the work should be done so as to give six weeks growth to the young plants before witer sets in. Therefore, they may be sown in September, October or November, according to latitude; but just before winter sets in they should be covered with a light coating of hay or straw, for though in some measurse frost proof, young onions will not stand severe cold without serious injury. But whether sown in the spring or fall, we assure our correspondent he will meet with small success unless he is careful to prepare his land after the manner we have directed. Once prepared, an onion patch may remain there for half a century, and with advantage to the crop. In proof of this, not long since the writer was shown a field in onions close by the new town of Pullman, a suburb of Chicago, which has been cultivated in onions for forty years, or since the settlement of that section by a body of emigrants from Holland. And what seemed singular, no manure had been put on the land for twenty years, though a part of the explanation may be that for the previous twenty, lavish applications were made.

In regard to planting seeds or sets, in the absence of accurate information as to our correspondent's soil, situation and surrounding circumstances, we should advise seed, since it will be found much less expensive in the end, and much more satisfactory to have made a crop from first to last. For the warm climate and early season of Mississippi, the mild and large Italian varieties might do well; but since only certain kinds are generally known in the average markets of the country, the common varieties would be best. These are the Wethersfield Red, the Danvers Yellow, the Yellow Dutch, the Silver Skin and others. Write to either of the nurserymen named above for the benefit of their experience as to what variety would suit your soil and circumstances best. Good onion seed is a scarce and dear article, and you may have to pay from $3 to $6 a pound.

And now in conclusion we must not forget to add that southern grown onions are not only more tender and nutritious than northern, but they are less rank in flavor and are always preferred by intelligent consumers. This year up to the middle of July the entire north was largely supplied by onions fetched from the distance which sold at 5 cents per pound. During the time, however, a few were brought up from the Gulf States, of which growing the farmers and gardeners there ought to have and keep a monopoly as much as of early strawberries or any other fruits or vegetables.

Revised Fruit List.

Since the last publication of our fruit list, we have, for satisfactory reasons, changed our opinion with respect to a few of the fruits which it contained. But in regard to the list as a whole we can see no just grounds for disturbing it. Indeed we do not see how it can be improved for this section of the country, or as a general list for all the middle States. Some of each of the separate selections may not do well upon one premises that will succeed admirably on another. Each grower must find out for himself the particular apples, pears, &c., especially adapted to his soil and location. This can easily be done by inquiries of those who are successful fruit growers, whose soil is somewhat similar to their own.

According to our present preference, we should select the following for our own planting, all of which we are now growing more or less successfully:

Standard Pears.—1. Giffard; 2. Doyenne d'Ete; 3. Early Catherine; 4. Kirtland; 5. Bloodgood; 6. Summer Julienne; 7. Tyson; 8 Brandywine; 9. Bartlett; 10. Belle Lucrative; 11. Manning's Elizabeth; 12. Seckel; 13. Howell; 14. Anjou; 15. Sheldon; 16. St. Ghislan; 17. Lawrence; 18. Reading. For those who may desire a smaller number, we should select: 1. Giffard; 2. Early Catherine; 3. Bloodgood; 4. Tyson; 5. Bartlett; 6. Belle Lucrative; 7. Seckel; 8. Lawrence; 9. Reading. They ripen in about the order they are arranged. In the above list, from No. 1 to 8 are summer varieties; from 9 to 16 autumn (early and late); and 17 and 18 winter, thus affording a sufficient number for each of the periods of the best known sorts for this region.

Dwarf Pears.—1. St. Michael d'Archangel; 2. Bartlett; 3. Comice; 4. Rostiezer; 5. Diel; 6. Tyson; 7. Belle Lucrative; 8. Lawrence; 9. Ott; 10. Louise Bonne; 11. Bosc; 12. Boussock; 13. Glout Morceau.

Apples.—1. Maiden's Blush; 2. Baldwin; 3. Smokehouse; 4. Northern Spy; 5. Smith's Cidier; 6. Fallawater; 7. Cornell's Fancy; 8. Red Astrachan; 9. Wagner; 10. Porter; 11. Gravenstein; 12. Tompkins' King; 13. Roxbury Russet. We add to the foregoing list the Tompkins' King and Roxbury Russet, both most excellent varieties; indeed the King is regarded by some as unsurpassed. Northern Spy is also restored.

Peaches.—1. Crawford's Early; 2. Hale's Early; 3. York's Early; 4. Old Mixon; 5. Crawford's Late; 6. Ward's Late; 7. Smock's Late; 8. Susquehanna. There is no solid reason to change this list so far as it goes. We suggested to peach growers to favor us with a list of their own, and a few did, but where they differed from ours we did not deem an improvement.

Grapes.—1. Telegraph; 2. Concord; 3. Hartford; 4. Clinton; 5. Salem; 6. Rogers' No. 32; 7. Brighton. We have added to the list No. 32, which, should it maintain its present character, will be the very best out-door variety cultivated. It is a beautiful pink, or rather maroon colored grape, and at times is transparent. It bears regular crops yearly with us. Clinton, in the foregoing list, is only for wine, and is probably the very best for that purpose. We also add the Brighton, a maroon color, as promising well. It is, however, a small berry and rather straggling branches, but almost pulpless, and of excellent quality. The Prentiss is another new grape, somewhat larger than the Delaware, of good quality and scarcely a preceptible pulp. It promises to take the lead of all the white varieties. The bunches are compact and of fair size. We have not tried it.

Cherries.—1. May Bigarreau; 2. Belle de Choisy; 3. Black Tartarian; 4. Black Eagle; 5. Black Hawk; 6. Elton; 7. Downer's Late; 8. Early Richmond; 9. Early Purple Guigne; 10. Del. Bleeding Heart. The ripening of the list will range from the earliest to the latest, thus carrying one through the whole cherry season. No one can go amiss in adopting the list.

Raspberries.—1. Hornet; 2. Herstine; 3. Philadelphia; 4. Brandywine.

Strawberries.—1. Captain Jack; 2. Seth Boyden; 3. Sharpless: 4. Triomphe de Gand.

Currants.—I. Black Naples; 2. Red Dutch; 3. White Grape. These varieties are the best among the different colors. The Red Dutch is a regular bearer and is of better quality than any other. There are others larger, but they are more acid. The White Grape is transparent, of good quality, and ought to be generally grown, but is not a great bearer.

Gooseberries.—1. Houghton; 2. Downing. These are the two best gooseberries grown in this country. They bear every year heavy crops, are free from mildew, and are of excellent quality. They are large enough for all practical purposes. Keep clear of the giants and their prices, and especially of foreign varieties.—Germantown, (Penn.,) Telegraph.

To Preserve Cider.

Cider is valuable in various ways when properly prepared and kept, and the following method will be found as good as any. The juice, as it comes from the press should be filtered through straw and then put into barrels and carried into the cellar, and placed upon blocks with the bungs up. The bungs should then be removed and fermentation will soon take place. The pomace and other impurities will work out through the bung-holes. As this works out, apple juice should be added sufficient to keep the barrels full, otherwise the impurities instead of working out, will rise against the top of the barrel and remain there.

It should be looked after every day and all feculent matter removed. When it ceases to work and no more matter rises, the bungs may be driven in tight. In a few days provide clean barrels, into the bung-holes of which insert a piece of cotton cloth, about an inch and a half wide and ten inches long, six inches of which have been dipped in melted roll brimstone, set on fire, driving up the bungs of the empty barrels tight, leaving the end of the cloth on which there is no brimstone out of the hole, so that the bung will hold it tight. Next remove the bung from the empty barrel, and draw off the cider from the full barrel into it, being careful not to allow any sediment to come off. Finally, bung up the barrel, letting it remain undisturbed a few weeks, when the cider may be bottled at leisure. There are numerous methods of adding sugar, isinglass and other substances, to facilitate the preparation of cider for bottling, but the natural process, as above described, answers a good purpose.

Dutch Bulbs.

The following directions for the planting and care of bulbs are from the New England Farmer:

These bulbs are quite hardy, and, since they require some time to form new roots, and since the roots begin to grow while the weather is still quite cold, they are best planted in the fall, about the 1st of November. They will then be ready to start into rapid growth early in the spring. The bed should be well enriched with a liberal dressing of fine manure, and the bulbs planted in an inch or so below the surface, and, if very early flowers are desired, the bed should be well covered up with litter to prevent severe freezing, and this covering being raked off in March will favor an early start. In sheltered locations the snowdrop will bloom early in March, or even in February, if the weather is mild enough to thaw out the frost. Just afterwards comes the crocus; a little later the fragrant and elegant hyacinth, the graceful narcissus, and the gaudy tulip. The anemone and scilla also are very pretty, and well worth more general attention. The anemone is not very hardy, and should have a good covering of litter for the winter. Most of these bulbs are easily forced and made to flower in pots in the house in winter—the only difficulty about forcing them being the time required to start them into a vigorous growth. If they are put at once into a warm room, they make feeble growth and small flowers; but, if time is taken to get them well rooted in the low temperature of a cellar, or out of doors when the weather is not too cold, then they will come rapidly forward in a warm room, and throw out fine, large flowers. The hyacinth, the cyclamen, the scilla, and oxalis, are favorites for the window, and the crocus also is quite easily grown in pots."

KEEPING APPLES.—A correspondent last year advocated keeping apples in damp cellars, claiming that they preserve better than in dry cellars. Mr. Vick, in his last magazine, says of this matter: "The evidence is accumulating that apples keep better in moist or damp cellers than in dry ones. It is probable that this may be established as a fact. It would no doubt be a blessing to most country houses, in a sanitary point of view, if their cellars were used only for small supplies of vegetables, and that they should at all times be ventilated as well as possible. Special cellars for fruit and vegetables are in use in some parts of the country. The walls rise only a foot above the surface; they are covered with a double floor, filled in between with sawdust, and over all is a roof. If room is desirable, low walls, one story above ground, can support the roof.

Extra Hardy Apples.

We find the following in a catalogue just received from Geneva, N. Y.: In the northern portion of the United States and adjoining provinces of Canada the feeling has prevailed until recently, that nothing in the shape of apples could be grown, except crabs. While this is true as regards many of the old varieties, a few Russian apples and northern seedlings have been introduced, which, though they may require better care than that under which the crabs will thrive, have proved themselves equally hardy. In proof of this we would point to the Duchess of Oldenburgh, growing on the highlands of Oneida and Lewis counties, and in northern New Hampshire and Maine. The following list we rate as hardy as the Duchess of Oldenburgh, and consider the fruit of many of them of better quality than the Baldwin. Against each variety we give the season of ripening at the north:

Tetofsky, August; Duchess of Oldenburgh, September; Alexander, October; Peach, October and November; Aucubafolia, November and December; Clark's Orange, November to February; Plumb's Cider, November to February; Wealthy, November to February; Bethel, December to February; Haas, December to March; Rubicon, December to March; McIntosh Red, November to April; Pewaukee, January to April; Walbridge, March to June; Quince Apple, March to June.

Treatment of Shrubs and Vines.

The Country Gentleman says of the fall treatment of shrubs:

Ornamental shrubs, planted about dwellings, are often neglected year after year, and become distorted in shape and stunted in growth. They may be greatly improved by manure and pruning. The manure should be applied in autumn as a top-dressing, extending at least as far from the stem on each side as the height of the shrub. The soluble parts of the manure will soak into the ground and accelerate growth next season. The mulching effect of the fibrous parts will be useful. Next spring, before growth begins, cut back the longer or larger portion of the branch and leaving the smaller, which will avoid any stump. Bring the shrub thus into handsome shape. If the growth is too thick anywhere, thin it out. If there are any crooked or dead branches, cut them off.

To this we add that now is the proper time to apply manure to vines as well. A thick coating of well-rotted manure to a vineyard will add largely to the yield next season, increasing the size of bushes wonderfully. Manure should also be spread among currant, raspberry and gooseberry bushes, and the pruning out of superfluous or dead wood may be done at any time.—Ex.

Curculio in Plum Culture.

Mr. Isaac Kauffman, Mountville, Penn., is reported, in the Lancaster Examiner, as having two plum trees of the same variety and apparently equal vigor, one of which bore nothing this year while the other was abundantly loaded with fruit in consequence of having been "shaken every morning for ten days while in blossom." Experienced plum-growers well know that merely shaking the trees with no effort to destroy the curculio as they are thus felled to the ground will do no possible good. Even if the weevils are destroyed either by chickens kept on a cooped under the trees, or by catchind on a sheet and destroying them, the work must be continued not merely ten days, but for five or six weeks, so long, in fact, as the curculio are caught. Apropos to the above is a remark made to me a few days since by Judge Ramsdell, the most extensive and successful plum-grower in Michigan. He said that the curculio was an advantage to him, as in bearing years they would so thin out the plums, as to make his crop far more valuable, and by carefully gathering all the wormy fruit in such seasons, as soon as it fell, and burning it, he so thinned the insects that the expense of fighting them during the off-year, and saving the small crop, was quite light. He placed great stress on the importance of gathering and destroying all the wormy fruit as fast as it fell from the tree.—Prof. Cook.

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ASHES FOR FRUIT TREES.—When apple or pear trees become diseased from being planted in unfavorable or ill-prepared soil, or from lack of food, they are very apt to be attacked by insects, which, if in healthy condition would probably be unknown. Certain washes, such as lye (a solution of potash), have been applied with success in destroying the insects and restoring the tree to health. But for our own practice, we have, for the last two years, applied a much simpler remedy with more success, as it causes the old dead bark, the chosen hiding-place of the insects, to cleave off, leaving in its place a smooth, healthy surface. This is simply, after a rain and while the bark is yet wet, to throw on dry wood ashes until the power of retention is full. If rain soon follows, the strength of the ashes is carried into every cranny of the old bark, and the effect is, working cleanliness on the tree. If there is no rain, the ashes will remain and be working their good effects, and be ready for action when the rain comes. The operation of thowing on the ashes is easily and quickly performed; if the tree is in a bad condition it is easily repeated until the insects are all destroyed, and a new, healthy bark covers the tree. Insects' eggs will never hatch under the influence of ashes. Two objects are gained by this operation—the ashes furnish food for the tree as well as destroy its enemies, and impart cleanliness to the tree.

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The London Garden declares its determination to use English words in naming plants. It will be a decided improvement, especially when proper names are introduced. Why should we not say Drummond Phlox instead of Phlox Drummondii? And why should a pretty Chinese pink be smothered under such a name as Dianthus Heddewigii diadematus flore-plenus? If the name of the originator must be used, let it be in English form and with English qualifying terms. Heddewig's Diamond Pink would certainly answer the purpose quite as well as the Latin lingo.

Mr. Meehan says that he is glad that the practice of washing the trunks of trees is increasing. The way to apply the wash is thus described: Keep the trunks and larger limbs of all fruit trees clean and healthy by a wash composed of one part sulphur fine as a powder, two parts soft soap, one part salt, all reduced by water to the consistency of whitewash, and to every bucket or three gallons, add a half pint of coal oil The latter is considered to be an effectual remedy against the borer, curculio, and a preventive for all insects. Apply with a whitewash brush or mop of rags or sheepskins.

Sometimes fruit trees are unproductive from other causes than poverty of the soil or neglect of the orchardist. They often grow too luxuriantly to bear well. In this case root-pruning is very effectual, and is performed by digging a circle around the tree, with the circle made close to the trunk of the tree. A fifteen year-old tree, for instance, may be encircled at five feet from the trunk. No rule can be laid down for this; judgment must be exercised. If cut too close, the tree may be stunted for years, and if too far, it will not be effective. The aim should be to reduce the roots about one-third.

I am very fond of roses and raise a great many from slips. I do not have any hotbeds or cold-frames, or other conveniences of similar kind. I simply stick my slips as I cut them in good garden soil where I expect my rose bushes to stand. Over each slip I turn a glass fruit jar, which remains all winter. As cold weather approaches, I draw the earth up around the jar a little for protection. My slips, set down in this way, rarely fail to succeed. I began to put them down last month, and shall continue to do so until about the first of September. I will add in conclusion, that I keep on hand a solution of whale oil soap to sprinkle over my rose bushes whenever infested with any insect pest, and have found it efficacious in all cases. One pound of the soap is sufficient for eight gallons of water.

The Apiary.

Extracted vs. Comb Honey.

As to which kind is the most profitable to produce, Mr. Dougherty, in the Indiana Farmer, remarks as follows, and at the same time indorses the views of the Bee Journal. He says:

As to which kind will pay the best, depends upon how it is to be sold, wholesale or retail, distance from the market, etc. You can produce one-third more, good, well ripened extracted, than you can of comb honey, and when you have a good home market, at retail, extracted honey will bring within a few cents as much per pound as comb honey. Where honey has to be shipped long distances, extracted honey will undoubtedly pay the best. The freight is cheaper. The loss from leakage is much less. Extracted honey is growing very rapidly, and in the near future, comb honey will be in little demand. In creating a home demand, it is well to produce both kinds, and as the trade increases, supply that which gives the best satisfaction. In producing extracted honey, caution is necessary in not extracting unripe honey, and in extracting so much as to rob the bees of necessary stores. Some bee keepers practice extracting the honey as fast as it is gathered, but honey in this condition lacks the fine flavor that belongs to a good article of extracted honey, and is liable to ferment and sour. None but a thoroughly good article should be produced and placed on the market, as the price will depend upon the quality you offer. You should only produce extracted honey that is equal to the very best article of comb honey. It is but little trouble to secure a crop of honey, when the extractor is judiciously used, during an ordinary honey yield, whereas at times it is almost impossible to make the bees work in the surplus boxes.

Bee Notes.

Every family who have a home, and keep house should have a few hives of bees. Nothing of so little cost will yield greater profit. Nothing is nicer and more healthy than a dish of honey on the table at meal time. It is a luxury and a substantial, and may and should be found at every farm house, especially.

Everybody knows that hornets, wasps, yellow jackets and all the varrieties of wild bees may be incased in frost and ice for months, and as soon as warmed and dried will be as active as ever. But the honey bee is not so constituted. Her blood is warm, and her system must be supplied with food to sustain life; yet during winter she lies in a semi-torpid condition, and may even seem to be dead, and yet be restored.

Bees have done usually well in Colorado this year. First class native honey can be had for 25 cents per pound. The dry atmosphere and the great amount of flowers in Colorado, make this a profitable State for bee-keepers, and we wonder that more people do not engage in bee culture and the production of honey. One hundred pounds of honey brings about twenty dollars in the market—equal to an acre of wheat, ordinary seasons.

List of honey producing trees and plants in their time of flowering. First the crocus; bulbs to be planted in the fall; flowers in the spring before the snow is gone. Willow, wild and golden; very productive of honey and pollen. Plum, wild and common. Cherry of all kinds. Apple and pear, very productive of honey. Barberry, a hedge plant with fruit. Raspberry of all kinds. White and Alsike clover, the great honey producing plants. Prairie climbing rose, single, very productive of pollen and fragrant honey. Spider wort a hardy perienni, flowers all the season. Phacelia a pretty little annual. Basswood a very fine tree for street planting on wet soils. Cucumbers and all of the squash tribe. Buckwheat last but not least.

THIRTY-FOURTH YEAR

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The editor has been absent the past ten days with a deer hunting party on the Gasconade river. Some notice will be given of it in our next issue.

Thanksgiving day occurs November 24th. Many of us have had reverses during the past year, but there are good reasons for thanksgiving, as the country was never in better condition.

As we write, the first real, wintry weather of the season, suggests good fires, warm overcoats and underclothing. The frost has been heavy, and the thermometer marks about 27 degrees.

The late sown wheat, rye, timothy, &c., are looking well. But two or three frosts have yet occurred, and they were not severe. The prospects for the next wheat crop are good up to date. We have never known so much wheat put in the ground so late in autumn.

There is a sort of sacred atmosphere about the presidency, that raises a man to a sense of great dignity, patriotism and responsibility, notwithstanding all previous record. It has been evidenced more than once, and now President Arthur is gratifying everybody—contrary to expectation—by his mild and moderate course.

The RURAL WORLD was never increasing in circulation as rapidly as at the present time. In other words, its circulation is booming. We like this. We try to make it worthy of the support of its great army of readers, and, in return, they try to enlarge that army. Readers, the more you do for the RURAL, the more it will do for you.

The RURAL WORLD will be sent free the balance of this year to all new subscribers, who remit one dollar for 1882. Now is the time to go to work in good earnest and get up clubs for the household scales, or the clock, which have given such great satisfaction to the hundreds that have received them. A club of twelve will get the clock or the scales.

We regret that the horticulturists of Illinois and of Kansas, have chosen the same date for the meeting of their State societies—December 6th. Many visiting brethren would like to attend the meetings of both societies, but that is impossible. Which State society can change its time of meeting hereafter? Let us hear through the RURAL WORLD. If put only one week apart, visitors from the east could attend both meetings.

Pork is looking up and will go up still higher. But why will not farmers learn to slaughter and put up all the hogs they raise? If pork packers make fabulous fortunes by buying hogs and slaughtering them and saving the meat, why will not the farmers find the same business profitable? Pork of all kinds will be very high next summer, and the farmer who has his smoke house well filled with it, will have a little fortune on his hands.

Mr. C. M. Schwarz of the Oak Hill Refining Company, Edwardsville, Ill., gave the RURAL WORLD office a call on Monday. He is en route to the southern sugar plantations, where he expects to spend the winter and learn all he can about sugar making. Mr. Schwarz is a close investigator, and we expect he will return with a fund of valuable information. He intends to work, if necessary, to learn the secrets of making good sugar.

Special reports to the Cincinnati Price Current show the number of hogs packed from March 1 to November 1, with comparisons, as follows:

	1881	1880
Chicago	2,700,000	2,971,127
Cincinnati	145,000	110,556
St. Louis	350,000	410,000
Indianapolis	168,000	383,165
Milwaukee	160,000	136,619
Kansas City	455,111	279,720
Cleveland	236 410	224,440
Cedar Rapids	200,000	259,655
Ottumwa Iowa	76,338	57,234
Des Moines, Iowa	52,234	56,526
Omaha, Neb	48,630	.....
St. Joseph, Mo	40,000	18 000
Detroit	38,000	44,217
Salula	20 000	33,192
Atlantic, Iowa	15,000	10,500
Quincy, Ill	6 000	6,000
Lafayette, Ind	5,000	.....
Chillicothe, Ohio	2,211	.....
Toledo, Ohio	.....	5,700
Atchison, Kansas	.....	223,447
Other places	55,000	33 500
Total	4,772,934	5,323,898

From March 1st to November 1st, 1880, or the summer season, at the main packing points, 5,323,898 hogs were packed. During the same time in 1881, 4,772,934 were packed—a difference of 550,966. But the prices in 1880 did not at all compare with the prices of 1881, and were not calculated to call so heavily upon the hog crop. And in 1880, there were oceans of corn, and low prices for it. Hogs were then held and fattened, as the best means of securing good pay for the grain as well as the hog. This year, corn ruled high, and many millions of bushels of old corn were sent in to secure the fancy prices; and this led to the shortage in the country, which induces the payment of 75 cents to $1 per bushel for corn in the country feed lots. But the quality of the grain is quite as conspicuously lacking as the quantity. In the face of all this, corn has of late persistently gone down. The reason assigned, and partially doubtless a true one, is that the grain could not be handled by exporters at the figures. But if there were no prospective export demand, sufficient to justify holders in carrying the grain, it would be re-distributed to the country—feeding prices would warrant it. The corn situation is about this: Strong prices induced heavy shipments to grain centers; the amount in sight is unusually large; bears have used this fact to depress values to a fictitious level; the quantity of gradable corn is exceedingly limited; when speculators shall have secured the bulk of the crop, prices will be put up rapidly and high. This is likely to occur before February. The hog market will follow much the same course for similar reasons. Prices have lately been, and are likely to be still further broken; but the absence of good hogs, while already felt severely, will probably show still more seriously later on. So that although the immediate prospect is not inviting, the ultimate range is destined to be high.

The agricultural depression in Scotland is bringing about a state of affairs, not unlike the land agitation in Ireland, and all bodies, including religious ones, are discussing seriously the situation and outlook. We learn from a recent issue of the North British Agriculturist, published at Edinburg, that the Free Synod of Aberdeen, an influential body of reverend gentlemen, who meet regularly to discuss matters of most interest to them, that the farmers' grievance was dragged into the reverend court by a zealous elder, at a late meeting, who is himself a well known land owner. He reviewed the dismal future visible for the farmer, and likely to continue, unless he was relieved by lower taxes and more reasonable rents, but his conclusion was that the present great depression really arose on account of the sins of the farmer. He said the farmers should walk more in accordance with God's mind and His laws. He advocated a resolution, which went to show that the distress they lamented was a visitation from God—advising them to beware of the great danger incurred by not acknowledging God's hand in all these things—and he finally, as shown by the votes, got three-fourths of the meeting to indorse him, as the resolution was adopted by such a majority. In this connection, we may add that few of the farmers in the United States, who deplore their situation and the results of short crops, had thought of this. It is not generally believed that the farmers are a very sinful class. Indeed, as a body, they cannot be accused of crime to any great extent in any country. Other people suffer from crop failures as well as farmers—some more—those depending on them, and all classes are more or less affected by the failure of crops. According to this logic, the Almighty is castigating over the shoulders of the farmer—the other classes, as some of them are equally punished.

During the revolution, Philadelphia was the scene of direct contrasts, the patriotic record of the city being a glorious one, but somewhat tarnished by the actions of the aristocratic Tory party which were very broadly satirized by Stephen Hopkins, and other writers of the day. Upon the settling up of differences after the war, a good many scores of enmity were wiped out, and pity 'tis that these same Tories remained in the country instead of going where their sympathies lay. Their spawn have thriven evidently, and upon the visit of some cion of European blood, their flunkey origin cannot forbear asserting itself. Minister West, is an English gentleman of great good sense, a wise and moderate thinker and no doubt enjoyed the practical joke played on a number of their shoddyites a few days ago, as well as anybody concerned in its perpetration. Mr. West was expected to arrive, but in place the "ton" of the Quaker City were presented to his "secretary," a cultured gentleman of wide experience, whom they loaded with attentions and to whose reminiscences of great people they listened with unspoken admiration. When they were informed that he was only the valet of the English minister, it was remarkable how their divinity was robbed of his attributes. They bit their lips and gave him such a decidedly cold shoulder that the poor flunkeys began to think the stories of equalty in America were cruel myths and delusive fables. It is a little humiliating to think that to a very great extent this class is the very one which is fighting against such western interests as the improvement of the Mississippi, and with what success we know. Americans merely by chance, they have no tastes in common with Americans, ape foreign airs and graces (heaven save the mark), and absolutely despise the national peculiarities and attributes that have made us a distinctive people. The people of this Mississippi valley are the Samsons of this country, but so long as they send men to the Senate and to Congress, who will not fight this would-be aristocratic class, so long will they be shorn of their strength and will be made to pay tribute to the improvement of eastern creeks and roadways out of which there is not a dollar of benefit to them, to be looked for, while their own claims are treated with contemptuous neglect.

A correspondent, writing to one of our exchanges, says: In saving my seed corn, I hang it up in the smoke house and smoke it just as I do my meat. I build a good smoke every day, until both corn and cob are perfectly dry. It must be kept in a dry place until planting time and where there is plenty of air. Be careful and not let it heat in the shock before it is hung up. I have saved my seed corn in this way for the last twenty years and it never fails to grow.

Cabbage Growing for Profit.

There is perhaps no humble calling regarded with as little interest as that of cabbage growing. This sort of business is never credited with anything in the nature of a bonanza, and certainly the people engaged in the business for a livelihood, would never be suspected of becoming suddenly rich on the results of their labors. In the vicinity of Chicago, there is considerable ground devoted to the business. At Bridgeport, and around the Stock Yards, the industry flourishes. The usual price on board of cars, at any of the depots, is four cents a head, or $4 per 100. This price, it seems, has been remunerative. This season, notwithstanding the drouth, the crop has been very fair. The shipments in every direction have been large. The prices prevailing from the start were high, and steadily advanced. For three or four weeks past, St. Louis has purchased four to eight car loads per day, and nearly as much for weeks previous. The past three weeks the price on track in Chicago was $400 to $500 per car, or $11 to $13 per 100. There are a great many growers there, whose shipments have so far exceeded forty cars, or cash receipts of $20,000. If at the usual price of $4 per 100 paid, there was a clear profit to each of the large shippers of $15,000, the frugal habits of most of the people engaged in this business, would enable them to live comfortably on the interest of the above sum the remainder of their lives—thus having acquired a competence, the result of one year's work. Where is the calling or profession, with the same amount of capital invested, of which as much can be truthfully said?

Sheep Dogs.

Some weeks ago, allusion was made in these columns to a most ruthless slaughter of fine sheep belonging to Capt. Thomas T. Turner by worthless curs, one of the most valuable flocks in the west being almost ruined. In this connection especial interest attaches to an exhibition of Scotch colley dogs recently held in Baltimore, a step for the elimination of a great and expensive evil, which should have been taken long ago. Dogs are a necessity to be sure, but why the vicious sheep worrying ones should be employed in certain sections, when nature has so wonderfully provided for man's wants, in the intellectual and sagacious colley, is a marvel. Long ago we spoke of the profit and benefit to be derived from the propagation of this splendid form of animal mentality—the most perfect perhaps existing—and now that so much has been done for pointers, setters, hunting and toy dogs, that the most useful of the kind is receiving careful attention. Dr. J. W. Downey exhibited six collies upon the occasion referred to, and gave wonderful examples of the skill and intelligence of the dogs in driving sheep.

A correspondent of the American Field says, referring to Tweed II.:

A flock was turned in, and it was wonderful to see how he managed them. Tweed worked entirely by motion of the hand at first. At a whistle, he would stop and look around to receive orders, but it was patent that he knew as well what to do as his master. The management of sheep by this dog was closely watched by every one, and elicited general commendation. Dr. Downey says that when a flock of sheep are half a mile or more off, he calls out with a wave of the hand, "get away back," the dog immediately goes in that direction until he sees the sheep, gets behind them and works them towards him. If, when the sheep are being brought to him, he wishes a second flock of sheep, he whistles; the dog stops, and he calls out, "get far away back." In obedience to this order, the dog brings up the second flock. In dividing the flock of sheep, the dog proceeded until he got in a line behind the sheep with the shepherd, and then, in obedience to a motion of the hand and the words, "come through here," divided the flock.

It is strange if these wonderful animals do not have a series of premium classes in all western agricultural fairs. It is useless to have their good qualities, swamped at bench shows, where the interests are largely in favor of hunting, sporting and toy dogs. The colley, as the most useful of his kind, deserves a place alongside of more sterling, practical and matter-of-fact industries.

Bogus Butter.

COL. N. J. COLMAN:—Judging from your remarks on "Bogus Butter," in last week's RURAL, you have fears it may be generally sold in St. Louis again this winter.

The law enacted last spring is positive and severe, that it will be enforced I can assure you. The Lardine agent, (Mr. Spring who refused to prove it was a safe article of dirt by using a little) can no longer claim I am the only dealer here opposed to it, for ten of the most prominent are now united with me, and have subscribed for the purpose of enforcing the law against it fully. It is a strage fact, that of the ten dealers subscribing, those who sold it heretofore, seem most opposed to it now. Gov. Chas. P. Johnson has been secured to prosecute, and the first case comes up in the Criminal Court on the 16th inst, when I trust the law will be found perfect, and conviction follow. We can then say good-bye Lardine, you won't cause winter cholera here as you did in Chicago all of last winter. However, if the law should not hold in this case, we shall try again. W. N. TIVY.

St. Louis, November, 4th, 1881.

The Farmers' Congress.

COL. COLMAN: I have read the constitution of the Farmers' Congress as presented in your last issue. No one at all familiar with me personally will accuse me of being in any sense opposed to any measure or measures which will benefit the farmers. Au contraire. But this constitution does not seem to me to be a well digested instrument. No difficulty about the appointing power and the making of the appointments, but who is to foot the bills? The constitution makes provision for a treasurer, but not a word do I find as to the source from whence he is to draw money. It details some of the work to be done by the president and vice-presidents, and also of the secretaries, but says not a word about compensation for their time and labor. Who will pay traveling and other expenses of the delegates from Maine, California or Oregon, or even from Ohio, Indiana or Kansas? Can we look for men fitted for this work, which is expected of them, so unselfish as to volunteer time and money simply for the honor of the thing? It is impossible. There is no doubt men can be found in each State willing and able to represent the farmers and willing also to sacrifice themselves for the good of the people, but I fear for their constancy. There are higher points—and better paying ones too—to be reached by this stepping stone. Some men are anxious to labor on school boards and boards of other educational institutions without fee or reward, but who will attribute their action to phylanthropy or unselfishness? Show me a way, Col. Colman, to refund to the delegates if only their actual expenses of mileage and board and it will strengthen my faith amazingly in the ultimate success of the "Farmers' Congress?" And mind, if you please, that I am speaking of men as they are; exception would only establish a rule.

Kind readers, if you know a way out of the dilemma hinted at, please let us hear from you. C. W. M.

Kirkwood, Mo., Nov. 11, 1881.

Salt on Wheat.

The Lenawee County (Mich.) Farmers' Club recently had this topic up for discussion, and from the report of the Adrian Times of what was said, the following is epitomized:

Mr. Kimball, of Rome, was invited to give his experience in using salt as a fertilizer. He said that he commenced using salt as a fertilizer on his wheat. Used 200 lbs. to the acre. Thinks that it materially increased the yield and stiffened the straw. The ground was clay loam. Three years ago sowed 300 lbs. to the acre. Left three acres where the salt was not sowed. Where the salt was sowed the straw was stiffer, the yield better, and the insects troubled it less. Sowed salt last fall on thirty-five acres. Knows that it stood the drouth better. Some of this yielded forty bushels to the acre. He derived more benefit from using salt on mucky ground. Thinks the best time to use salt is during seeding time. He put it on corn when planting, and knows that he received a great deal of benefit from it.

Mr. Dunn stated that two years ago he sowed 200 pound to the acre; could not see any difference. His wheat was very heavy and lodged a great deal.

Mr. Bradish had used salt. Could not say that it did any good. Thinks that cold, sour soil would be benefited from it.

Mr. Steere thinks that clover and plaster are our main holds. Was glad to hear if salt is good.

Supporting the Papers.

A complaint was made of men not supporting papers devoted to their specialty and the friend addressed has the following to say which is so pertinent and sound that we venture to give it here though written privately:

In respect to sheep men supporting papers devoted to their specialty, nearly all farmers, whatever be their specialty, if they have been born and brought up on a farm, are very stupid as regards the benefit to be derived from papers devoted to their interests. The most progressive farmers, and those who read the most, are men of decent education; artisans turned farmers, or men of some means who have been raised in cities, who know that there is no limit to knowledge or progress and are quite aware that they do not know it all.

Now the average farmer thinks he is as smart or a little smarter than any one else and knows it all. So, dear sir, you see there is little hope of doing any good with men who have arrived at such a pitch of perfection. It is throwing pearls before swine to talk of the benefit to be derived from agricultural journals to men who are like the nigger who said, "I knows ebery ting, I does." So as the English say, "Let them go to the devil their own way." Cadet, Mo.

A Convention at Washington.

The Commissioner of Agriculture in a letter to Alex. Heron, Secretary of the Indiana State Roard of Agriculture, under date of July 26, 1881, says that it is his purpose to call together in convention, to be held in the Department of Agriculture, during the coming winter, such representatives of the various branches of agriculture in this country as the leading Agricultural Associations may select as delegates, and asks the State Board to choose properly qualified representatives from this State to attend such meeting.

Dr. Loring wishes to meet in this convention representative men classed as follows: Those who are interested in and skilled in—First: The breeding, feeding and sale of cattle. Second: The production of the cereal crops of the country. Third: In grape culture and the manufacture of wines. Also, those having charge of Agricultural Societies and the educational agricultural institutions of the country.

The object of the meeting is to discuss the general welfare of agriculture and the various divisions of the industries alluded to. The first of the series will be held January 10th, and will be devoted to the Colleges and Agricultural Societies, and will continue two days. The second, on the 12th of January, and will be devoted to the discussion of the animal industries of the country and the various modes of raising cattle, horses, sheep and swine. This will continue two days. The third will commence on the 14th of January, and continue the day following, and will be devoted to the discussion of all matters relating to cereal crops. The fourth will begin on the 17th and end on the 18th of January, and will be devoted to the discussion of the management of vineyards and wine manufacture.

Such a convention will no doubt, through its published discussions and papers to be read there, do much good in disseminating knowledge on the important interests to be represented.—Farm Herd and Home.

Mr. Cooper of Indiana, in regard to seeding to grass, says: I have sowed clover, timothy and blue grass, and the longer it lays the more blue grass it gets. It gets thicker all the time, and keeps moulting off at the head until it becomes sort of bunchy.

In the autumn or early winter bore a hole one or two inches in diameter, according to the girth of the stump, and about eighteen inches deep. Put into it one or two ounces of saltpeter, fill the hole with water and plug it close. In the ensuing spring take out the plug and ignite it. The stump will molder away, without blazing, to the very extremity of the roots, leaving nothing but ashes.

Lime benefits the soil partly by supplying plant food—almost all the useful plants contain considerable lime—and partly by decomposing inert substances in the soil. Lime liberates fixed ammonia, decomposes vegetable matter and destroys the acidity of sour soil. Its abscence from the soil is generally shown by the presence of useless or noxious plants, and its presence is ordinarily indicated by the growth of the more valuable plants. When refuse lime can be obtained it is one of the cheapest fertilizers that can be employed.

A few years since, says a writer, I had an old pasture that had almost run out, covered with weeds and patched with moss. I mixed a few barrels of salt and wood ashes, and applied about two barrels of the mixture per acre, covering about half the lot. The result surprised me. Before fall the moss had nearly all disappeared, and the weeds were rapidly following suit, while the grass came in thick, assuming a dark green color, and made fine pasturage. The balance of the lot remained unproductive as before, but the following year was salted, with like result.

Kerosene oil or naphtha, or even turpentine, will in a short time penetrate between minute crevices in joints that have long in contact, whether bolts or nuts or steam joints. They should be ignited when possible, when the effects of heat and diffusion will soon loosen the metals. Nuts rust so tight sometimes that no wrench will remove them without breaking off the bolts. A gentle hammering on the sides and top will sometimes start them a little. A driven joint, or rust joint, between flanges, formed by cast iron borings and sal ammoniac in solution in them, can not be parted by any means short of destroying the castings. The scrap heap is the only remedy.

The Scientific American says that charring and coating with tar are only desirable when combined; that if simply charred the surface would only become absorber of moisture and hasten decay; whereas, applying only tar, there would be but a casing around the wood, nor would it penetrate so deap as the absorbing properties of the charring. First char, and before cooling apply the tar until the wood is thoroughly impregnated; and do this a little above the line of exposure to the air, since it is at that point the post weakens first. The heating evaporates the acid and oils in the tar, and leaves the resin, which enters the wood and makes it air and water tight.

A cord of stone, three bushels of lime and a cubic yard of sand will lay 100 cubic feet of wall. Five courses of brick will lay one foot in height on a chimney. Nine bricks in a course will make a flue eight inches wide and 20 inches long, and eight bricks in a course will make a flue eight inches wide and 16 inches long. Eight bushels of good lime, 16 bushels of sand, and one bushel of hair will make enough mortar to plaster 100 square yards. One-fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching of the floor. One thousand laths will cover 70 yards of surface, and 11 pounds of lath nails will nail them on. One thousand shingles laid four inches to the weather will cover 100 square feet of surface, and five pounds of shingle nails will fasten them on.—Am. Cultivator.

Rye is a most excellent forage plant, especially for early spring pasture—a time when it is very much needed. It starts early and can be pastured close, even up to the first of June, and still get a good crop of grain in July. But be sure to keep the milch cows off it. It inparts a very disagreeable taste to both milk and butter—not so bad as onions, but akin to it. It makes rather laxative pasture for sheep, and they should not be put upon it before shearing. A twenty acre field of rye, sown in August, of the previous year, will furnish more pasture than forty acres of blue grass, timothy or any other of the narrow bladed grasses. Clover will produce more after it is in bloom, but you can not turn in upon it with safety or profit until June. But do not undertake to raise rye for the grain product, if you have a good wheat farm, and never raise both, for it will, in spite of the greatest care, be seen striking its heads all over your wheat field—damaging the sale of your crop and your reputation as a wheat grower and tidy farmer.

A quantity of wheat in a bin may be easily measured in bushels as follows: Level the surface of the wheat, measure the pepth in inches; and the length and breadth of the bin also in inches; multiply these together and divide by 2,150, which is the number of cubic inches in a struck bushel. For instance, a bin 12½ feet or 150 inches long and 43 inches wide has a surface of 6,450 square inches, and for every inch in depth there will be precisely 3 bushels; if the wheat is 30 inches deep in such a bin there will be 90 bushels in it. As 12½ feet by 3 feet 7 inches (or 150 by 43 inches) is a convenient size for granary bin, it would be easy to mark the inches on the end or side, and for each inch to mark three times the number of bushels. A mere glance at the bin will then give the quantity of wheat in the bin.

Col. Dan Murphy, of Halleck's Station, Elko county, came to California in 1844, and may be said to have made the country pay him well for his time. He is now probably the largest private land owner on this continent. He has 4,000,000,000 acres of land in one body in Mexico, 60,000 in Navada, and 23,000 in California. His Mexican grant he bought four years ago for $200,000 or five cents an acre. It is sixty miles long and covers a beautiful country of hill and valley, pine timber and meadow land. It comes within twelve miles of the city of Durango which is to be a station on the Mexican Central. Mr. Murphy raises wheat on his California land, and Cattle on that in Navada. He got 55,000 sacks last year and ships 6,000 head of cattle a year right along.—Reno (Nev.) Gazette.

It is one sign of a good farmer if he prizes manure. It does not require a good farmer to raise bountiful crops on a farm already rich, but the art lies in so managing the farm that it will produce good crops every year without losing its fertility. A man may make money from his farm while he is wasteful of fertilizers, but he is not a good farmer, for he is constantly running his land into debt. Good farming consists of such management as will make the farm produce the best possible results without deteriorating the soil. This can only be accomplished by a rigid economy in the making and using of manure, and by such a systematic rotation of crops as will be the least exhaustive to the soil.

Learn first what your soil will produce, and then study the wants of the market upon which you must depend for the sale of your produce—and the nearer home you can find the market the better—and try to produce the best of its class of articles, and sell them as cheaply as anyone else can. This is the rule that should govern producers in selecting crops to cultivate or stock to breed.

There is quite as much necessity for barn cleaning on the farm as for house cleaning, and if farmers were as punctilious about the renovation and purification of the out-buildings as farmers' wives are about the dwelling, there would speedily be an improvement about the appearance of things as well as of convenience.

A Wisconsin farmer, twenty-three years ago, planted a piece of waste land, unfit for cultivation, with black walnut trees. The trees are now from sixteen to twenty inches through, and have been sold for $27,000.

A man in Sonoma County, Cal., has sold over $700 worth of carp this year from a pond covering less than an acre of ground, and has 20,000 fish of various sizes remaining.

A great many farmers in Cape Colony have disposed of their sheep, and have made extensive preparations for ostrich raising.

Of all the crops raised in the United States Indian corn is the most important and valuable, as it is the largest in extent, and commands the greatest cash value, and is applied to more useful purposes than any other. It may be regarded too, as the most wholesome. Every animal, and every graniverous bird from the partridge up, prefers it to all other grains, and as to man, is not popularly upon an equality with wheat as an article of diet, it is next to it, and is rejected by none.

State crop reports based upon carefully-prepared statistics show that the corn crop of the entire country is short about one-third as compared with last year. The only western states showing increases are Wisconsin, Minnesota and Nebraska, where the aggregate increase is about 28,000,000 bushels. In Ohio, Illinois and Iowa the decrease aggregates 188,000,000 bushels. In these three states, however, there is an unusually large quantity of last year's crop still in sight, and the prospect for low-priced corn for feeding is rather more encouraging.

The Cattle Yard.

All points of packing considered, the shortage of the summer season, as compared with 1880, was 350,000; and the winter season of 1880-1881, was 30,000 short of the preceding season.

At St. Louis for the week ending Nov. 9th, 1880, the hog receipts were 50,222, at $4 25@4 70 per hundred for packers, and during the week ending November 9th, 1881, receipts were 26,428 at $5 50@6 00 per hundred.

At this season of the year in 1879, packing hogs were worth $3 40@3 60, and for the week ending Nov. 11, 1879, St. Louis received 45,000.

In 1880 for the corresponding week, St. Louis received 50,222, and the price was $4 25@4 70.

This year for the week ending Nov. 8th, St. Louis received 26,428, and the price was $5 50@6 00 for packing hogs.

Corn in 1879, at the same time, cost 35⅞@36 cents.

In 1880, corn cost 42¼@42¾ cents, and and 1881, the cost of corn was 59¾@61 cents.

In October, 1880, the National received 2,409 cattle, and in October, 1881, 3,585 cattle—a gain of 1,176 head.

In October, 1880, the hog receipts were 83,788, and in October, 1881, 103,486—a gain of 19,698.

In October, 1880, the sheep receipts were 4,771, and in October, 1881, 26,094—a gain of 21,323. Total gain 42,197 head of live stock.

Live Stock in Missouri.

COL. COLMAN, I recently purchased imp. Athlete, ch. foaled 1872, bred by Mr. Wm. Blenkirow, by Gladiateur, winner of the 2,000 guineas, Derby St. Ledger and the grand prize of Paris, dam Rose of Kent by Kingston; second dam England's Beauty, by Irish Birdcatcher; third dam The Prairie Bird, by Touchstone; fourth dam Zillah, by Review; fifth dam Morisca, by Morisca; sixth dam Waltz, by Election; seventh dam Penelope, by Trumpator; eighth dam Prunella, by Highflyer; ninth dam Promise, by Snap; tenth dam Julia, by Blank; eleventh dam Spectator's dam, by Partner; twelfth dam Bonny Lass, by Bay Bolton; thirteenth by Darley Arabian; fourteenth dam by Byuly Turk; fifteenth dam by Taffolet Barb; sixteenth dam by Place's White Turk; seventeenth dam a natural Barb mare. Gladiateur, the sire of Athlete, was the best race horse of his day. He is by Monarque, dam Miss Gladiator, by Gladiator. Rose of Kent, Athlete's dam was by Kingston, son of Venison and Queen Ann, by Slane. Rose of Kent is own sister to Silverhair, the dam of Silvio, who won both Derby and St. Ledger in 1877, and of Garter, by Belle. England's Beauty was by Irish Birdcatcher, son of Sir Hercules. Birdcatcher was the sire of Baron, who sired Rataplan and the great Stock well. Athlete's great grand dam, The Prairie Bird, was by Touchstone, winner of the St. Ledger and sire of Blue Bonnet, winner of the St. Ledger; Cotherstone and Orlando, winners of the Derby; New Minster of the St. Ledger, and Surplice winner of both the Derby and St. Ledger. The pedigree of Athlete is full of stout and speedy crosses, and he should be a grand success in the stud, as the horses descended from the family have not only been grand performers on the turf, but successful stallions. Among the most famous from the family might be mentioned imported Glencoe and Mr. Morris' Eclipse.

I have also purchased Eurydice, brown mare, foaled 1876, Imp. Leamington, sire of Iroquois, winner of the Derby and St. Ledger in 1881, dam Maud by Imp. Australian, second dam Martha Buford, by Wagoner, &c. Maggie B. B., the dam of Iroquois, is also by Imp. Australian. J. LUCAS TURNER.

Iowa Stock Breeders.

The Iowa Improved Stock Breeders' Association meets this year at Iowa City, commencing on the 13th day of December. Judge Luse is president, and he is fully alive to the great interests of improved stock breeding, and is well posted as to its every detail. Fitch B. Stacy is secretary—correct, precise and always ready. This annual convocation is of the highest importance to the greatest interest of Iowa agriculture and Iowa wealth. At this meeting will be congregated the progressive farmers of the State, wide awake and full of interest. Many may, but no one engaged in agriculture can, afford to stay away. A man may stay on his farm, dig and delve, and forever remain a mere drudge. But if he goes to this association and has a mind above an oyster, he will be awakened and aroused to more thoroughly work out the great problems of life. These earnest men imparting valuable information from the stores of experience for the past years, scanning and criticizing every idea advanced and every system proposed, cannot otherwise than awaken profitable thought. Their earnest zeal and burning words will leave deeper impressions on the mind than the mere reading of even the best reports. Men are so constituted that a live man with a well stored mind will sharpen not only the face but the intellect and the energies of their friends.

An Iowa stock breeder can go to no place or spend his money to no better advantage than to these annual associations. They should go not only as listeners, but as workers. This association is materially aiding in accumulating the most valuable agricultural literature. The ripest men of the State are laboring with care to produce and place on record the fundamental principles for successful breeding and improving the stock of Iowa. They include in their programme all kinds of domestic animals. And as Iowa is to stand at the head in a few years, of nearly all branches of agriculture, as it does already in a few of the most important, the foundation must be laid right. In fifteen years Iowa will stand at the head of the improved stock breeding interests of the United States. It already stands at the head of the dairy industry. And the association is to lead forward this great work. And we have no fears of their failure. The noble men who have inaugurated and built up this association can be trusted. They are ample in talents, experience, and discretion for the work. No other State has a superior class of men to shape the destiny of a great State.

But as we said no farmer who expects or aims to keep abreast of the times can afford to neglect these meetings. It will infuse new zeal, inspire nobler aspirations, and prepare any and all for greater efforts and nobler purposes.—Iowa Register.

Cattle Notes.

Good stock can not be secured without care and attention. The ordinary farmer does not concern himself about pedigrees in his own stock, but he does care about the cattle he raises. Accordingly he should see that what he raises are from pure bred male animals and then that they are properly fed.

One of the things to be repeated and impressed is the great value of top-dressing pastures. Grass as a crop and as a fertilizer for the cereals is becoming generally appreciated. At least the farmers are aware that stock and grass are more profitable than grain, but it is not generally known that a very slight coating of manure on the grass gives them strength to feed, makes the turf close and firm and easily doubles the product of the grass. In no way can manure be used more profitably than top dressing.

When twin calves of the same sex are born, the fact of their being twins does not in any way interfere with their breeding qualifications, but when of the opposite sex the heifers are as a rule, non-breeders, but the males are considered as reliable as when of a single birth. In case of twins of opposite sex the heifers are often coarse, having the general appearance more of the male than the female. Such are called free martins, and very seldom will breed, yet even among these a few exceptional cases are known.

The straw of all grains should be carefully husbanded and utilized Properly fed, it can be made to go a long ways toward bringing stock through the winter in good condition. But it must not be fed alone. Grain, oil meal, or cotton seed meal must go along with it to supply lacking elements. In feeding cows, the following plan may be followed: Give all the straw they will eat, with six quarts of wheat bran per day to each cow; or mix corn meal and bran, one part of former or two of latter, and feed four quarts per day. Dampen it with bran or meal water to which a little salt has been added; or mix bran, corn meal and oil meal. Probably as good proportions as any would be one part of meal, one of corn meal, and four of bran, and feed four quarts of this mixture per day to each cow.

We believe cow-pea hay the best, properly put up, of any we ever had anything to do with. There are, however, many drawbacks, in securing a goodly quantity and quality, which all have experienced. When cut too late, it always loses its leaves, at least to a great extent; thus a good deal of its strength is gone to start with. This can be avoided by cutting soon after the pods begin ripening. Great difficulty is often experienced in curing such heavy vine stuff as cow-peas are. When cut at their best stage for hay, we do not believe it possible to cure them, by their first day's sun, sufficiently to put up in stack or barn. We think they require two or three days, to make them nice, dry hay. Of course, leaving them laying in the fields, exposed to the night dews, spoil them more or less, while a rain may entirely destroy their value. These troubles we can avoid, in a great measure, by putting up in nice cocks every night; covering the same with enough old hay or grass to keep out the dew or, if necessary, the rain. In this way, if the weather is not too bad, we can get some good hay. The deplorable way many have of planting the peas in the corn rows and chopping them off with a hoe when they are far past their prime, is miserable; then hauling in a lot of black strings free from leaves and comparatively worthless, instead of the bright, leafy stuff it should be, thickly covered with pods almost, if not quite, as rich as corn.—Louisiana Sugar Bowl.

The Horseman.

Grain as Food For Horses.

Horses, like other herbivorous animals, can live, grow, and become fat without any grain; but, if a horse has to work, grain is necessary. It is also indispensable if we desire to raise a horse that possesses strength and endurance, because it is the tissue-producing constituents of grain, especially if combined with exercise, that develop the muscles. A great many of our farmers, and especially a great many of those who desire large horses, make a very serious mistake, in raising their colts, by not giving them sufficient grain after they are weaned—forgetting that a heavy frame and large and powerful muscles can never develop unless the material to grow from is provided. The colts are usually all right till weaning time, but after that the youngsters have often to shift for themselves, and do not get what their constitutions require, because many farmers seem to think that grain should be given to horses, but only to such as have to work, and to them only when in harness. This is a mistake, particularly as far as young colts are concerned. If the same have some liberty, they are apt to take all the exercise they need, provided their owner furnishes the necessary material—feeds them enough grain to bulid up their muscular tissue—and, as a necessary consequence, the youngsters will grow to be strong, well-developed, and vigorous animals. On the other hand, if a colt, immediately after it has been weaned, is compelled to subsist exclusively on a little hay, some withered and often frozen grass, and such other rough food as can be picked up in a barnyard, in a corn stalk field, or in a fence-corner, the animal very soon will cease to care for much exercise; it has no time nor inclination; it has some more urgent business, and must pick and glean all day to fill its digestive organs to their utmost capacity, because, of its bulky and innutritious food, large quantities are required to provide a sufficient amount of nutrients to support life and to keep up the animal heat. Even if the digestive organs are filled to their utmost capacity—and those of a colt just weaned, and used to very nutritious food, the milk of its dam, are not remarkably large—not much nutrient material if any, can be spared for the growth and development of the muscles and of other parts of the body; on the contrary, the nutrient constituents of the bulky and innutritious food hardly ever suffice to support the functions necessary to life and to produce as much animal heat as is needed, and the animal organism is compelled to consume some of its own tissues. In such a case, the young colt, instead of growing and gaining strength, will emaciate and grow weak. No wonder that it will have not much inclination to take muscular exercise. It is true the capacity of its digestive apparatus soon increases—increases even out of proportion; but, as the season advances, the available food, too, becomes poorer and poorer in nutrient compounds, and the same food—hay, straw, withered grass, etc.—contains towards spring a much lower percentage of nutrient elements than it did in the fall, and the animal has not gained much by the greater capacity of its digestive organs—its large belly doesn't do it any good. When spring comes, the only parts of a colt thus kept that have grown are its head, its tail and its belly; all other parts have decreased in size, or are less developed than they were in the fall. It is incomprehensible how an otherwise intelligent farmer can expect to make a good, strong, well-developed, and heavy horse of a colt thus treated, or rather neglected; and still the number of colts compelled to rough it, and to subsist without any grain, after they have been weaned, though probably decreasing, is every year a very large one. A young colt should never be allowed to lose an ounce of flesh after it has been weaned.

Horse Notes.

Pink-eye is ravaging the horses in Philadelphia, but not in a dangerous form.

The success of Foxhall has caused his sire King Alfonso, to be much sought after by Kentucky breeders.

Edward Pyle, the proprietor of a stock farm at Humboldt, Neb., recently sold the bay mare Maxie Cobb, by Happy Medium, for $2500.

Mr. Charles Upperman has certainly a fine 3-year-old brown mare, by Hambletonian Mambrino, out of Mr. Chris Elwanger's fast road mare Bristol Maid.

The famous young California trotters Sweetheart, 3 years old, record 2:22, and Eva, her full sister, 2 years old, record 2:26, are to be placed in the hands of Mr. O. O. Hickok next season.

Maud S., the phenomenal trotter, has been turned into pasture to rest. She has traveled over 4,000 miles this year and won $30,000, and her season was only half finished when she was retired on account of a sprained leg.

Mr. Edward S. Stokes, in a recent interview with the editor of The Turf, said he would match Sweetheart against Phil Thompson for $10,000 a side, the race to be trotted some time in July next, either at Chicago or New York,

The National Live Stock Journal says: As ordinarily used by breeders in this country, the terms thoroughbred and purely-bred are synonymous; but, strictly speaking, the term thoroughbred is the name of a breed of horses, and should not be used otherwise.

When people see a horse's head drawn up by the bearing rein, and see him stepping short and champing his bit, tossing his head and rattling the harness, they assume that he is acting in the pride of his strength and fulness of spirit, whereas the animal is really suffering agonies of pain, and is trying to gain by these movements, momentary relief.

On Wednesday of last week Messrs. Hubbell & Quarles held at the fair grounds in Columbia, a public sale of horses, Col. C. T. Worley, auctioneer, amounting in the aggregate to about $3,000. The stock embraced many animals of extra blood and the prices as a rule were very low. The recent drought renders a sale of stock at this season not a very profitable business.—Columbia Herald.

The Dublin Farmer claims that a full feed of hay to horses, to follow concentrated food is wasteful, and crowds the latter out of the stomach before proper digestion occurs. This authority claims that the hay should be fed first to avoid the above mentioned trouble. A hearty drink of water upon a full stomach also operates to push its contents into the intestines before there is proper digestion.

Mr. Thompson, the well-known caterer at the railroad station at Wilmington, was asked recently as to the whereabouts of the old horse General Howard. "The last I heard of him," said Mr. Thompson, in a kind of a serio-comic way, "was his advent in a 4-year-old race somewhere in the east. As to his age, I think the General is about 9 years old; remember, I say about 9 years." There was a laugh all around.

One of the curiosities in the Paris Jardin d'Acclimation is a mule named Catherine, which was purchased several years ago while on her way through Paris with a Barb stallion and a foal by this horse to the Exhibition at Vienna. When purchased by the Paris Society she was again in foal to the same horse. Since she has been in Paris she has thrown two more mare foals (by a jackass) which may be seen every day drawing the small tramway cars. Her fifth and last produce is a four-months colt foal by the Barb sire mentioned above.

Tip Bruce, of Danville, Ky., under date of November 7, says: "The Messenger Chiefs are still on the boom. Jesse Bunn and Clay Mock have talked Messenger Chief so much that they actually think they can make him get any kind of a colt a man may order." Messenger Chief's pedigree, published some time since in The Record, shows him to be one of the most royally bred of any stallion in Kentucky, and we think nothing is hazarded in predicting that the winning trotting sire of the Blue Grass Region in the next ten years will be George A. Singerly's Messenger Chief.

It is well remarked that the horse, in constitution, is nearly as delicate as man, and seems to have been particularly singled out as a subject for new diseases, or new forms of old complaints, as scarcely a year has passed since the appearance of the epizooty in 1871 that diseases to a certain extent akin to it have not prevailed. This fall the "pink-eye" is quite as prevalent in a few localities as the epizooty was, and is somewhat similar to it in its effects. The symptoms are, discharge of a watery fluid from the eyes, accompanied with some fever and swelling of the legs. Recuperation sometimes soon follows, but in other cases the symptoms increase until death ensues.

France expends three-quarters of a million of francs annually in the purchase of native horses in Algeria for cavalry wants, besides awarding prizes to breeders and supporting studs. The horses of Algeria are not good looking, but they are serviceable and bear immense fatigue. The Arabs continue to prefer mule rearing to horse breeding. The mule is more easily reared, fetches a higher price, and often commences work at the age of 18 months. For the Arab the mare is his all; her foal, if of the same sex as the mother, is a joy, and is reared; if the contrary, a veritable calamity. Cattle rearing is more remunerative than horse breeding, and less liable to deception.

BREAKING COLTS TO THE HALTER.—"A stitch in time saves nine" in handling colts, as well as mending clothes. Commence handling the young foals from their very birth. They are much more easily gentled and halter-broken during the first few months than at any subsequent period, and, as a rule the longer it is deferred the more difficult the work becomes. The easiest way in the world to break a colt to the halter is to tie him in the stall by the side of its dam, and to lead him by her side occasionally when she is taken out for exercise or work. The time thus employed is never missed, and many young things that might otherwise grow up wild, vicious, and unruly, are made gentle, kind and tractable.

QUARTER-CRACK.—The edges of the crack should be rounded off without cutting into the depth of the crack. Cleanse the parts, and soften the hoof by means of poulticing, the shoe being removed. With a view of preventing the split from extending upward, make a cross-cut or horizontal cut, through the horny fibres, immediately above the split. In extensive cracks, the edges may be held together by means of carefully-inserted rivets. To prevent entrance of dirt, fill the crack with shoemaker's wax. If the split extends through the length of the hoof, remove the bearing of the hoof from the shoe, back of the split to the heel, and apply a bar shoe. Apply a mild blister above the hoof. If the horse can be spared from work, he should be given liberty on pasture during two or three months.

The Shepherd.

Edited by R. M. Bell, of Brighton, Macoupin Co., Ill., to whom all matter relating to this department should be addressed.

A Hampshire Lamb.

A Hampshire lamb, says the London Agricultural Gazette, is a living wonder, an infant prodigy, a standing miracle, sold by the hundred, the best lot will bring this season $15 each for the butcher at mutton price. A lamb thirty weeks old, to weigh eighty pounds has, be it remembered, to make two and a half pounds of mutton every week since it was born. Is there another breed of sheep can do the same? Hampshire lambs seven months old have been let for one month at $3. One hundred ram lambs averaged $59 at Fort Hill a short time since. The early maturity of Hampshire sheep is due to the use of ram lambs, careful breeding and liberal feeding. One butcher showed us two loins of mutton the other day, one from a Down, the other from a cross bred. The difference was striking. The cross bred loin was covered with a layer of fat an inch thick, and the lean was small in proportion. The Down loin was much fuller of lean flesh and the unsightly, unpalatable layer of fat was absent.

A Meeting that may Interest Wool Growers.

What may be termed a "Tariff Meeting" is to be held at the Cooper Institute, New York City, on November 29th and 30th. Among other objects the "call" for the meeting says that congressional action will be asked for the appointment of a competent commission to thoroughly investigate and report upon the progress, condition and needs of American industries, and to recommend such tariff legislation as will be protective in character, consistent in all its parts, and adapted to the present condition of the business of the country.

The consideration of the policy of an early and progressive reduction of internal taxes by the general government.

The maintenance of a favorable balance of trade, and the enlargement of our markets for American products, by the promotion of our ship-building interests and foreign commerce.

Nearly every industry is to be represented, and whether wool growers, individually or politically, are in favor of a tariff, they should look after their interests, and if protective plums are thrown around, they should see that their lap is not empty.

In the representation to the convention New York city industries get 100 delegates, out of 500. The National Association of wool manufacturers get 25, the silk manufacturers, 25; cotton 25, jute, flax, hemp, &c., 25; National Wool Growers, Association, 25; hosiery, 10; New York Wool Growers and Sheep Breeders, 10; Wisconsin, 10; Illinois, 10; Vermont, 10; Michigan, 10; other farmers and planters, 25. Besides this, iron, glass, corsets, &c., &c., are to be represented. The signers to the call for the convention give themselves 100 delegates, making 600 in all.

Of the convention, the Wheeling Intelligencer says:

This convention will be an important gathering and we are somewhat surprised to notice the great wool-growing region of Ohio, West Virginia and Pennsylvania is not assigned a representation. We presume that the omission can be remedied in some way, although the quota of 600 members, to which the convention is limited, seems to be made up by the assignment quoted above. However, the proper step is to communicate with the officials who called the convention.

Grubs in the Head of Sheep.

L. H. D., Earlville, asks: Will you please give the symptoms and causes of grubs in the head of sheep, and oblige one of your subscribers.

REPLY.—The larva, which are frequently found in the nasal chambers and frontal sinuses of sheep, are propagated and developed in the same manner as the larva of the horse-gadfly (bots), which are so commonly found in the stomach of horses. The species of insects which attacks the sheep, the Oestrus ovis, and that which proves so troublesome to the horse in the summer months, belong to the same family. The former seeks the nostrils and frontal sinuses of its unwilling host. As soon as the larva is deposited at the entrance of the nostril it proceeds upward holding on by the firm hooks which cover its head, and makes its way into the furthest recesses of the nasal chambers, causing the animal in its progress great pain and irritation, resulting sometimes in vertigo, inflammation of the brain, and death. Sheep have great dread of the fly, and on its approach will run wildly about, bury their heads downwards, jostling against each other to drive away their enemy. When struck by the fly they stamp the ground violently and exhibit other signs of distress amounting to agony. The treatment recommended is as follows: 1. By dislodging the bots by violent sneezing; for this purpose tobacco snuff can be shaken into the animal's nostrils, or, when owing to the number this is impracticable, they may be driven into a close shed and irritating substances, such as horn, leather, feathers, etc., be burned. 2. In severe cases, the horns are sawed off close to the head, the sinuses opened with a trochar and some sweet oil and turpentine poured in. 3. The sheep are seized, and the nose held up while a teaspoonful or two of a mixture of equal parts of sweet oil and turpentine are poured into the nostrils. This requires some care that the animal is not choked by the fluid passing into the lungs. It is, however, very efficacious. To prevent the flies from depositing their eggs in the nostrils, some herdsmen smear the noses of their sheep with tar during the months of June and July. Others run furrows across the field so that the sheep can protect themselves from the flies by burying their noses in the dirt.—Ex.

Sheep Notes.

A sheep dairy for the manufacture of cheese has been started near Chattanooga. The stock numbers 1,000 head, and the business will be under the charge of an experienced cheese maker from Tyrol.

MERINO SHEEP.—"The average number of my lambs raised is from my Merinos about 80 per cent. Compared with the ewes kept, they are not, as a rule, as good nurses as most of the other breeds, some of which will raise nearly 100 per cent. of their lambs."—J. W. Watts, Martin's Depot, S. C.

The present consumption of wool is running largely on the best wools. Low and coarse wools are neglected, if we except carpet descriptions, because manufacturers are turning out a better class of goods than usual, for which there is a quick sale. Foreign wool is selling so high abroad that we cannot expect any cheap importation of fine wools.

It is said that the Australians have a very stringent law for the eradication of scab in sheep. They have the state scab inspectors, whose business it is to see that the law is enforced. Every sheep owner who discovers indications of scab in his flock is obliged to notify all flock-masters within a certain radius, of the fact, and also to post notices in public places. If the disease is not stamped out within ninety days, the diseased animals must be killed. The result has been that scab has almost disappeared from Australian flocks.

A farm can be stocked with sheep cheaper than with any other animals. Sheep will come nearer to utilizing everything which grows on the farm. Less labor will be required for getting feed and stock together. The returns will come in sooner and oftener than with any farm-stock except hogs. Less money is required for shelter and fencing, and less labor is required in herding, when ontside pasturage is accessible and preferred. And finally, a handsome income on the investment can be had without the sale of the animals themselves.—Boston Cultivator.

Many a dollar that would otherwise come to the flock owner is lost through his failure to appreciate the fact that maximum profit is secured through the quality and condition of his sheep, rather than through their numbers. Quality and condition are the indispensable requisites to real success. The first of these is secured through breeding, the second through subsequent attention. "Blood will tell," but its record will never be satisfactory unless the breeder's art is supplemented by the feeder's liberality. The well-bred lamb must be a well fed lamb, or the breeder's ideal will never be attained.

A warm discussion is going on between scientific and practical men as to the possibility of profitably rearing precocious Merinos for the butcher. The scientists assert the practice is remunerative, but their opponents reply, offering an examination of their accounts, that since thirty years they have been occupied with the question, and have never found the precocious Merino a paying investment, save where the rams are reared and exported for breeding purposes. A flock then of Merinos, highly fed, and destined early for the butcher, does not pay in France at least. Scientific authorities are called upon to rebut these facts by counter facts.

COLMAN'S RURAL WORLD of September 29th complains of the condition of lambs in Missouri and that section of the country. It says that they are the victims of disease from parasites. While it does not give the kind of worm, we are inclined to believe that "lombriz" is what is the matter with the lambs, from the symptoms described. What is known as "lombriz," the Spanish for worm, has been one of the terrors of the Texas sheep men and is now the subject of earnest discussion. We hope in a few weeks to enlighten wool growers on the question of this enemy of the sheep, and invite all men interested to communicate with us.—Texas Wool.

MORE ABOUT SHROPSHIRES.—A correspondent, writing from Ohio to the Country Gentleman, says of this breed of sheep: Two years ago I bought a Shropshire ram and put him in with a flock of grade Southdown ewes, so that I had lambs drop on and after Jan. 10. The first fifteen lambs weighed at Easter from forty to fifty-five pounds each. Not having had experience in the early lamb trade I let that time slip by, and did not sell until later, when I sold to the butcher at $4 per head, he making the remark that he would have been glad to have had them at $5 just before Easter, which was a valuable though expensive hint to me. The next year we sold lambs the first week in March, nine and ten weeks old, that weighed fifty to fifty-five pounds, for $5 each. I suppose in some parts of the country almost double that price could be had for the same lambs; however, I felt well paid for my trouble at that price. "In regard to the breed and manner of feeding, I will say that there is seldom a poor lamb, all being strong, sound and plump, and coming to maturity quick. I felt more than satisfied with my purchase of a Shropshire ram. In addition to good clover hay, I feed about six quarts of corn per day to fifty sheep, and about two weeks before the lambs begin to drop I give instead of corn, a bushel of turnips or carrots cut fine, with six or eight quarts of wheat-bran, two quarts of corn-meal, and two or three times a week replace the corn-meal with oil-meal or cake. This will produce milk, and the ewe will most surely own her lamb. I put each ewe alone in a pen two or three days as soon as the lamb is dropped then put them in a flock by themselves, when their roots, etc., should be increased to all they will eat with a relish. The young lambs will soon be as ready to eat their share of roots as the mothers."

The Home Circle.

Letter from Minnie F.

"I saw a father and mother, who leaned
On the arms of a dear gifted son.
And the star in the future, grew bright to
their gaze,
As they saw the proud place he had won;
And the fast-coming evening of life promised
fair,
And its pathway grew smooth to their feet;
And the starlight of love, glimmered bright
at the end,
And the whispers of fancy were sweet;
And I saw them again bending low o'er the
grave,
Where their hearts' dearest hope had been
laid,
And the star had gone down in the darkness
of night,
And the joy from their bosom had fled.
But the Healer was there, and his arms were
around,
And he laid them with tenderest care;
And he showed them a star in that bright
upper world—
'Twas their star shining brilliantly there!
They had each heard a voice—'twas the voice
of their God,
love thee, I love thee, pass under the rod!'"

Dear Idyll, when I read of the death of your darling, my heart was filled with sympathy and my eyes with tears. Truly you have been called to pass through deep affliction in giving up your first born, after having kept him so long. Yet I trust the Healer will be near you, and that you may be able to feel that "He doeth all things well."

To the friends of Ambert and Gertrude, allow me to offer my heartfelt sympathy. Though death has never robbed me of a near relative, I feel that you must suffer deeply. Perhaps I shall not long be so favored as I have been in the past. Who can tell? None of us can tell what to-morrow may bring us. Will not Ambert's sister and Margaret Shoemaker join the Circle?

Nina and Gillie Lee, please accept my congratulations, even at this late hour.

Nettie H., of course you are welcome. Do not be frightened off. I, too, was raised my ma's pet, but as I am four years older than you, I am not very easily scared. I fully agree with you in the opinion that the unfortunate typos get more censure than they deserve. They always treat me first-rate. I do not know that I have ever had reason to complain.

Lloyd Guyot, you are too amusing. Really I think Bon Ami a good writer. The great trouble with him seems to be (if he will excuse me for saying so), that he is already too conscious of that fact to be popular.

Bon Ami, you should have more regard for the feelings and opinions of others.

I must not forget Don Juan, where is he? But I suppose he got frightened at the "applause, which could not be controlled." But it is getting late. Good night. MINNIE F.
Stanberry, Mo.

Phonetic Spelling.

Archbishop French, in the "Study of Words," remarks that, by the adoption of the phonetic spelling, little would be gained and much would be lost. The same writer says that the labor of learning to spell has been absurdly exaggerated. If anything can be decided by "ipse dixit," I know of no higher authority on a question of language than Archbishop French. It is urged against our present system of spelling that it requires too much of the student's time. To this I reply that, if spelling were taught right, it would not be so difficult to learn how to spell all the words one could make use of in writing. It is not necessary for one to know how to spell more than about one-twentieth of the words in Webster's Unabridged Dictionary. While the orthography of our language should not be changed, there is great room for improvement in our methods of teaching spelling. None of our spelling books are exactly suited to the needs of the young. Swinton's Word Book and McGuffey's Revised Eclectic are perhaps the best in use. But I object to the Word Book, because the diacritical marks are not used, and to the Eclectic, because the words are not grouped with reference to their meaning. Correct orthœpy cannot be learnt without the diacritical marks, and orthography cannot be remembered, unless the meaning of a word is at the same time fixed in the mind. I can conceive of nothing which would injure a child's mind more than Webster's abominable spelling book. Indeed, no man has been a greater enemy to learning in America than the eccentric, ignorant, Noah Webster.

If spelling were taught right, there would be no better training for the young mind. We go to school, not so much for instruction as for education. The child should have his mind educated—drawn out. We can get knowledge at any time, but the mind must be trained in our youth.

So much for our present system. I shall now offer some illustrations of the effect of a change in spelling. We have two words—beau and belle—transferred from the French into our language. Beau means beautiful, and is applied to a man. Belle is the feminine form of the word, and represents a handsome woman. Suppose that the phonetic spelling should be adopted. In the course of time, none but philologists would know how the words were originally spelled, and what was their etymology. Ordinary scholars would take the words "bo" and "bel," and try to use them in their etymological sense. They would be much more likely to suppose that "bo" was from the Latin *bonus*, and that "bel" was from the Latin *bellum*, than to suppose that the words were of French origin. They would commit the error of speaking of a good man as a "bo," and the preposterous blunder of calling a virago a "bel."

I am glad the discussion of phonetic spelling has commenced in the RURAL, for there is nothing that gives me so much pleasure as the study of a language. And if the discussion should be kept up, I shall gladly withdraw from this discussion of those questions in which I am so likely to give offence to some very good, but prejudiced people. BON AMI.

Letter from Lloyd Guyot.

Bon Ami thanks me for writing his biography, and would write mine in return were it not for "infringing on Fair Play's copyright." No thanks are necessary. Mine was a gratuitous work, and I am proud it pleased Bon Ami. Such was my intention at the start. If Bon Ami has anything tragical to relate about my "private character," as he says by way of inuendo, he would much oblige me by letting the Circle know of it. I acknowledge there is a time in my past life, involved in about five years of mystery, and I would, indeed, be glad to know how I conducted myself during that time. As for my life after my seventh year, I can fully vouch that, though it may not be a flattering record, it is at least one free from any crime, and not stained by the cursed blot of infidelity. However, the contempt of the Gainesville ladies has, no doubt, unfitted him for any undertaking where truth is required, and he justly deserves their contempt. From my very soul I pity you, Bon Ami.

Paulus, I take it all back. But you will have to acknowledge that I am farther from the likeness of a windmill than you are from that of Sancho Panza. I am a very moderate windmill, if one at all, Paulus, and never feel bad when a crazy man runs at me to make a conquest. Thanks for your kind words.

Cousin Kate wants to transform the Circle into columns of special dispatches on the latest manner of baking corn bread; that was it, was it not, Cousin?
November 5. LLOYD GUYOT.

Cleanliness.

The skin is one of the most important depurating organs of the whole body. From each of its millions pores constantly flows a stream, laden with the poisonous products of disintegration. As the water evaporates, it leaves behind these non-volatile poisons, which are deposited as a thin film over the whole surface of the skin. As each day passes, the process continues, and the film thickens. If the skin is moderately active, three or four days suffice to form a layer which may be compared to a thin coating of varnish or sizing. The accumulation continues to increase, unless removed, and soon undergoes further processes of decomposition. It putrefies, rots, in fact, and develops an oder characteristic and quite too familiar, though anything but pleasant, being at once, fetid, putrid, pungent, uncleanly, and unpardonable.

But the offense to the nose is not the extent of the evil. The unclean accumulations chokes the mouths of the million little sewers which should be engagedin eliminating these poisons,and thus obstructs their work. Being retained in contact with the skin, some portions are re-absorbed, together with the results of advancing decay, thus re-poisoning the system, and necessitating their elimination a second time.

Here water serves a most useful end if properly applied. It is unexcelled as a detergent, and by frequent application to the skin will keep it wholly free from the foul matters described. The necessity for frequent ablutions is well shown by the fact that nearly two pounds of a poison-laden solution, the prespiration, is daily spread upon the surface of the body. It is not an uncommon occurrence to meet with people who have never taken a general bath in their lives. Imagine, if possible, the condition of a man's skin, at the age or seventy or eighty years, which has never once felt the cleansing effects of a thorough bath.

One of the most serious effects of this accumulation of filth is the clogging of the perspiratory ducts. Their valve-like orifices become obstructed very easily, and depuration is then impossible. It is not wonderful that so many people have torpid skins. The remedy is obvious and always available.

A man who has a perfectly healthy skin is nearly certain to be healthy in other respects. In no way can the health of the skin be preserved but by frequent bathing. A daily or tri-weekly bath, accompanied by friction, will keep the skin clean, supple, and vigorous. There is no reason why the whole surface of the body should not be washed as well as the face, and hands. The addition of a little soap is necessary to remove the oily secretion deposited upon the skin.

A lady of fashion, in enumerating the means for preserving beauty, says: "Cleanliness, my last recipe (and which is applicable to all ages), is of most powerful efficacy. It maintains the limbs in their pliancy, the skin in its softness, the complexion in its lustre, the eyes in their brightness, the teeth in their purity, and the constitution in its fairest vigor. To promote cleanliness. I can recommend nothing preferable to bathing. The frequent use of tepid baths is not more grateful to the sense than it is salutary to the health and to beauty. By such means, the women of the east render their skin softer than that of the tenderest babe in this climate. I strongly recommend to every lady to make a bath as indispensable an article in her house as a looking glass."

When the foul matters which ought to be eliminated by the skin and quickly removed from the body are allowed to remain undisturbed the skin becomes clogged and inactive, and soon loses its natural lustre and color.

The best baths are the Turkish Baths. Try one, at Dr. Geo. F. Adams, Turkish Bath rooms, No. 311 N 7th, between Olive and Locust streets, St. Louis, Mo.

Letter from Adah.

Allow one more entrance into your lively Circle. I have been a reader of the RURAL for about two years, and like all other female readers, find the Home Circle the most interesting page. I am very sorry, indeed, to hear of the loss of two members of the Circle. We see the dark mantle of death, hanging over their pens—never to give us one more word.

I will not compliment Nina on her writings, for she receives so many, but I can justly say she deserves all. If I gain admittance, I will call again some day. I wish everlasting success to the Home Circle. ADAH.

To Husbands.

Always complain of being tired, and remember that nobody else gets tired.

Your wife should have everything in readiness for you, but you should not do anything for her.

When your wife asks for money, give her a nickel; ask her what she wants with it, and when she tells you, ask her if she can't do without it.

Then go down town and spend ten times the amount for cigars, for they are a necessity.

Go down town of an evening, stand around on the street corner and talk politics; its more interesting than to stay at home with your family.

Charge your wife not to gossip, but you can spin all the yarns you wish.

Have your wife get up and make fires, but don't get up yourself till the rest of the family are eating breakfast, as you might take cold.

Wear old clothes, and make yourself as untidy as possible until your wife's health fails, then it would be best for you to fix up some, for in all probability you will want another when she is gone.

Have a smile for everybody you meet, but get a frown on before you go home. —Physiologist.

Cold Feet and Sleeplessness.

The association between cold feet and sleeplessness is much closer than is commonly imagined. Persons with cold feet rarely sleep well, especially women; yet the number of persons troubled is very considerable. This is the plan to adopt with cold feet: They should be dipped in cold water for a brief period. Often just to immerse them and no more is sufficient; and then they should be rubbed with a pair of hair-flesh gloves, or a rough Turkish towel, till they glow, immediately after getting into bed. After this a hot water bottle will be successful enough in maintaining the temperature of the feet, though without this preliminary it is impotent to attempt to do so. Disagreeable as the plan at first sight may appear, it is efficient; and those who have once fairly tried it continue it, and find that they have put an end to bad nights and cold feet. Pills, potions, lozenges, "night-caps," and all narcotics fail to enable the sufferer to woo sleep successfully; get rid of the cold feet and the sleep will come of itself.—From the Boston Medical Journal.

Medical Use of Salt.

In many cases of disordered stomach a teaspoonful of salt is a certain cure. In the violent internal aching, termed colic, add a teaspoonful of salt to a pint of water, drink it and go to bed. It is one of the speediest remedies known. The same will revive a person who seems almost dead from receiving a heavy fall. In an apoplectic fit no time should be lost in pouring down salt and water if sufficient sensibility remain to admit of swallowing it; if not, the head must be sponged with cold water until the senses return, when salt will completely restore the patient from his lethargy. In a fit the feet should be placed in warm water, with mustard added, and the legs briskly rubbed, all bandages removed from the neck and a cool apartment procured if possible. In many cases of severe bleeding at the lungs, and when other remedies failed, Dr. Rush found that two teaspoonfuls of salt completely stayed the blood. In case of a bite from a mad dog wash the part with brine for an hour, and then bind on some salt with a rag. In toothache warm salt and water held to the part and renewed two or three times, will relieve it most cases. If the gums are affected wash the mouth with brine. If the teeth be covered with tartar wash them twice a day with salt and water.—From the Boston Medical Journal.

Wildness is a thing which girls cannot afford. Delicacy is a thing which cannot be lost or found. No art can restore the grape its bloom. Familiarity without confidence, without regard, is destructive to all that make women exalting and ennobling. It is the first duty of a woman to be a lady. Good breeding is good sense. Bad manners in a woman is immorality. Awkwardness may be ineradicable. Bashfulness is constitutional. Ignorance of etiquette is the result of circumstances. All can be condoned and not banish men or women from the amenities of their kind. But self-possessed unshrinking and aggressive coarseness of demeanor may be reckoned as a state's prison offense, and certainly merits that mild form of restraint called imprisonment for life. It is a shame for women to be lectured on their manners. It is a bitter shame that they need it. Do not be restrained. Do not have impulses that need restraint. Do not wish to dance with the prince unsought; feel differently. Be sure you confer honor. Carry yourself so lofty that men will look up to you for reward, not at you in rebuke. The natural sentiment of man toward woman is reverence. He loses a large means of grace when he is obliged to account her a being to be trained in propriety. A man's ideal is not wounded when a woman fails in worldly wisdom; but if grace, in tact, in sentiment, in delicacy, in kindness, she should be found wanting, he receives an inward hurt.—Gail Hamilton.

The Abolition of Petticoats.

It would appear that the doctrines of woman's emancipation from the trammels of feminine dress, promulgated with considerable vigor by strong-minded ladies in the United States, have recently been enthusiatically adopted by an association of German women, which, under the significant title of "Clothing Leauge for the Abolition of Petticoats," recently held its first meeting in a concert room of the Brunestrasse, Berlin. A chairwoman having been duly elected, the proceedings were opened by an eloquent speech setting forth the inconveniences and disadvantages, from a sanitary point of view, of the flowing garments hitherto deemed appropriate wear of civilized females. This discourse pronounced it to be a sacred duty of every member of the association to discard with the utmost promptitude such objectionable raiment, typical of all the disabilities wrongfully ascribed to woman by her oppressor—man—to assume in its stead a "dualistic covering for the legs, as well as for the arms." This daring programme of action was hailed with acclamations of approval by all save one, a Frau Peters, who courageously stood up for the denounced petticoat, upon the ground that it was far more becoming than trousers to members of the female sex. Her protestating voice, however, was drowned in a storm of indignant clamor, and a resolution embodying the sentiments previously enunciated by an overwhelming majority of the fair leaguers.

Big Words.

Was there ever such an era for big words as this? Petticoat went out when crinoline walked in. Elastics have driven garters from sight and memory.

No man rides on horseback now; he takes equestrian exercise. We have no city papers; they are metropolitan journals. Metropolitan journalists write about epistaxis; they mean bleeding at the nose.

Women are no longer married; they enter into connubial bliss by being lead to the hymeneal altar. Nobody sells tooth powder or hair wash; it is dentifrice, sozodont and capillary decoction.

Every writer in this age of sham and metaphysics, uses glibly the words phlebotomy, diagnosis, etc. These titantic high-falutants must run their course, and then we shall again come down to that pure well of English undefiled that every lover of those sturdy little Saxon words delights to drink from.

Asiatic Cholera.

The cholera is spreading in the east and advancing toward Europe. It has already made considerable ravages at Aden, and has reached Mecca, where the Mussulmans are imploring their prophet. Two other epidemics attract serious attention. The first is the yellow fever in Senegal, where the number of victims has been great, and the second diphtheria, which has killed more people in the south of Russia than any other epidemic, not excepting the plague. It has prevailed there since 1872. In Bessarabia, 15,600 out of 36,000 persons who were attacked have succumbed to it. Out of 46,000 cases, 19,000 ended fatally, and in Karkoff, out of 29,000 cases there have been 17,000 deaths.

Every editor loves to have his friends, and particularly his readers, call on him. They belong to the same family, as it were. But when you call to see the editor don't stay too long. Editors are generally very busy in business hours. If you have any suggestions to make or news to communicate, state it in as few words as possible. Don't offer any excuses or indulge in a long preface to what you have to say. Blurt it right out; tell the editor you wish him well, and bid him good-day. Editors dote on such men as that; they love to recieve calls from them. Don't argue with them; don't try to do it; he has no time for argument while at his work. When you write to an editor for publication make it short—boil it down. Pitch right into the middle of your subject, and be sure to stop writing when you get through. Editors always like something fresh and original in the way of communications, and are especially fond of news. But the editor must always be the judge of what is worthy of publication. Of course every writer thinks his own production the best, just as every mother thinks her own baby the prettiest that ever was born. But the editor may be so stupid as to have a different opinion. If so, it can't be helped. Don't try to argue him out of his notion. If he is too stupid to appreciate a good thing, you can't expect to remedy his dullness. You may think you are a good deal smarter than the editor, and that may be true, but the editor may be responsible and you are not.

The following rules to test good flour are given by an old dealer: First, look at its color. If it is white, with a slightly yellow or straw-colored tint, it is a good sign. If it is very white, with bluish cast or with small black specks in it, the flour is not good. Second, examine its adhesiveness. Wet and knead a little of it between the fingers; if it works dry and elastic, it is good; if it works soft and sticky, it is poor. Flour made from spring wheat is often sticky. Third, throw a little lump of dry flour against a dry, smooth, perpendicular surface; if it adheres in a lump, the flour has life in it; if it falls like powder, it is bad. Fouth, squeeze some of the flour in your hand; if it retains the shape given by the pressure, that, too, is a good sign. It is safe to buy flour that will stand all these tests, and they are simple.

To make good corned beef a correspondent says: To every 100 pounds of beef, take five pounds of salt, a quarter of an ounce of saltpetre, and one pound of sugar; dissolve in sufficient water to cover the meat. Do not allow it to remain over two weeks in the first brine, for it takes up all the blood that was in the meat, and consequently ought to be drained off, as the meat will be more likely to be injured than when separated and replaced with fresh brine, but more especially in warm weather. In this way it will keep with just sufficient salt to season it. In the second place, the cooking is of just as much importance as the corning; it should be boiled at least four hours, or until it can be cut and eaten as readily as a piece of soft bread.

Things Worth Knowing.

A poultice of fresh tea leaves, moistened with water, will cure a stye on the eyelid.

For earache, dissolve asafœtida in water; warm a few drops and drop in the ear, then cork the ear with wool.

The true physiological way of treating burns and scalds is to at once exclude the air, with cotton batting, flour, scraped potato or anything that is handiest.

Use fresh water. Water which has stood in an open dish over night should not be used for cooking or drinking, as it will have absorbed many foul gases.

Mix a little carbonate of soda with the water in which flowers are immersed, and it will preserve them for a fortnight. Common saltpetre is also a very good preservative.

Take a new flower pot, wash it clean, wrap it in a wet cloth, and set over butter, it will keep it as hard as if on ice. Milk, if put into an earthen can, or even a tin one, will keep sweet for a long time, if well wraped in a wet cloth.

Common soda is excellent for scouring tin, as it will not scratch the tin, and will make it look like new. Apply with a piece of moist newspaper and polish with a dry piece. Wood ashes are a good substitute.

To cure bunions use pulverized saltpetre and sweet oil. Obtain at a druggist's five or six cents' worth of saltpetre; put it into a bottle with sufficient olive oil to dissolve it, shake up well, and rub the inflamed joints night and morning, and more frequently if painful.

Flies may be effectually disposed of without the use of poison. Take half a teaspoonful of black pepper in powder and one teaspoonful of cream. Mix them well together, and place them in a room on a plate where the flies are troublesome, and they will soon disappear.

Red ants may be banished from a pantry or storeroom by strewing the shelves with a small quantity of cloves, either whole or ground. Some use the former, as not being so likely to get into food placed upon the shelves. The cloves should be renewed occasionally, as after a time they lose their strength and efficacy.

The following drink for relieving sickness of the stomach is said to be very palatable and agreeable: Beat up one egg very well, say for twenty minutes, then add fresh milk one pint, water one pint, sugar to make it palatable; boil, and let it cool; drink when cool. If it becomes curds and whey it is useless.

By using syrup or molasses for mustard plasters, they will keep soft and flexible, and not dry up and become hard, as when mixed with water. A thin paper or fine cloth should come between the plaster and the skin. The strength of the plaster is varied by the addition of more or less flour.

The Dairy.

American Cheese.

The home cheese trade is thought to be growing at the rate of 12,000,000 to 15,000,000 pounds a year. The conditions governing the cheese trade are different from those that influence the sale of butter. Only a dozen States, out of thirty-three, produce as much cheese as they do butter. The trade is also greatly concentrated. Twenty years ago a single man tried to "corner" the trade, nine-tenths of the cheese of the country at that time having been produced in New York and five adjacent States. The per capita consumption of cheese in this country is now between four and five pounds, but it is rapidly increasing, local tastes and other considerations governing the manufacture of the article. The combinations of competitions of freight lines make a difference in price of the article—but American cheese is handicapped about two and a half cents a pound, when placed on the Liverpool market in competition with the English product.

In 1880 over 40,000,000 pounds of cheese was sent out of the country, Great Britain taking 65 per cent. of the quantity. The typical cheese market in the United States is at Little Falls, N. Y.; Elgin, Ills., comes next, and St. Albans, Vt., third in the list in importance. New York receives one-half the cheese products of the country. Chicago comes next. In 1770 the colonies imported 56,000 pounds of cheese. In 1869, cheese began crossing the Atlantic. —Ex.

Care of Milk Cows.

During the intense hot weather of summer, cows, unless in very extra pasture, with plenty of shade and good water, fail very much in their productiveness. When partially dried up, it is hard to bring them into a full flow of milk again during the season. The greatest care should, therefore, be taken to give them a plenty of some kind of nutritious soil feed—corn, oats or whatever green feed a farmer may happen to have. Feed they must have or dry up; there is no such thing as milk and butter without feed.

If cows are obliged to work hard all day, in a short pasture during hot weather to obtain barely enough to keep them alive, they will become too much heated and fatigued to keep up a flow of milk; and whoever expects any profits from cows in hot weather, must feed them enough, so that as the heat of the day advances, they may retire to the shade for comfort and repose. Excessive heat is more injurious to a milk cow than short feed.

Cows require plenty to eat without great exercise to obtain it, and repose. It is more profitable to feed shorts, oil meal or other grain, where pastures are short, than to suffer cows to dry up.

Cows should be driven very slow, particularly in hot weather, that they may not be overheated—and if yarded nights, should always have a full supply of clean water. Cows give more milk and do better when kept constantly in the pasture, unless they are soil fed in the yard or stable.

Oil Meal for Cows and Calves.

When cows are in profit a little extra feed in the shape of oil meal will be amply repaid in the yield of milk and butter. It must not be supposed that because a cow is on pasture there is no longer any need for stimulating food. The fact is that with an ample supply of grass, the appetite of the cow for the meal is quite as vigorous as during the winter, when fed on hay. Cows may be very profitably fed with oil meal morning and evening. They will lick it up from a trough, if it is made sufficiently large, without any waste. When cows are not tied up at night a good plan for feeding them is to have a square box for each cow, large enough for her to put her nose in easily, and six inches deep. Put the allowance of meal in these boxes. They may be scattered about the yard, at such a distance as will give each an opportunity to eat without being driven away by the others. Calves will soon show in their greatly improved appearance and hastened growth that oil meal is good for them also. A small handful given them in their pasture daily will push them forward rapidly. It is well to use a small tin pan to feed them with, and a few minutes spent with the young stock daily is not only an agreeable occupation, but highly profitable, for the more regularly the owner's attention is given to his cattle the sooner he will see anything wrong and be able at once to remedy it, and a daily visit is seldom made unless there is some express purpose in it. Let the purpose then be to give them extra feed and a double benefit will result.

Dairy Notes.

Iowa is pushing to the front as a dairy State. The papers from that State tell wonderful stories as to the amount of butter made, and if they are only telling half the truth, one hundred million pounds will be made during the present year.

In various sections of Iowa, Illinois and Wisconsin, farmers are buying cows to make cream to sell to the creameries. They have found it more profitable than grain farming. As a consequence, cows have advanced in price 30 per cent. in the past year.

A dairy house has recently been built on the experimental farm of the Illinois Industrial University, which it is designed to make a "Dairy Experimental Station," so far as may be found practicable. Prof. Morrow announces his readiness to receive and test any new apparatus or process which may be submitted to him, and to report on its merits.

L. B. Arnold, in a recent article on butter making, has this to say of those who started in to beat the cows at their own business: "Four-fifths of all the companies in the United States formed for the manufacture of butterine have gone to the wall, making a total loss of almost $2,000,000 of capital, and those which have not failed have not made much show of prosperity. Where the toes of nearly every foot-print point into a cave, prudence would suggest it as not a safe place to enter."

Within the last two years, the value of the best Jerseys has increased three fold, and unless that increase is based on a general acceptance of the butter records claimed, I cannot see what has caused it. Something of fashion and something of speculation of course these have been, and there may be a reaction from the very highest figures already reached; but the value of a butter record will always be recognized in dollars and cents, and the best Jerseys will always sell at large prices.—Ex.

There is no animal on the farm that will pay so well to pet as the cow, unless it be her heifer calf. She should be the queen of the yard, and of the farm, too. Every member of the family should have a loving pat and a gentle word for her. Shoot every dog that makes her run a step, and discharge (I liked to have said brain) the hired man that ever kicks or scolds her. I firmly believe that the dairy product of Iowa could be doubled in less than 18 months just by kindness, gentleness and proper feed and treatment of the present stock of cows in her borders.—Coffin.

We know of a family who had an Alderney heifer in good flow of milk, and an old cow, a stripper; their cream worked together; it was observed they did not make butter enough for the bulk of the cream. The buttermilk also looked rich, and seemed to collect a cream upon it. They put the buttermilk in the churn again, after removing the butter first to come, which made about five pounds. They churned again for a few minutes, and found from two to three pounds more butter in the churn; showing that the heifer's cream had made butter first, and that the cream of the old cow needed several minutes' more churning.—Ex.

What was once mentioned as the little, despised breed of milch cattle, has sustained its reputation for excellence in butter, until fancy prices have been recognized as proper and the demand is universal. Now the Jerseys are exhibited, and hold first positions in all the cattle shows. Their merits were recognized a century and a half ago in the Isle of Jersey, from whence they take their name. Nature was most favorable to cattle on this island, and when their merits were established beyond question, especial care was given them. Thirty-five years ago, says Richard Goodman, Jr., only seven or eight hundred had been imported; but now there are shipped annually to this country about 3,000. The revenue and benefits are therefore so great that Jersey men are very proud of their stock.

The Poultry Yard

Late Hatchers.

The Poultry Monthly says that the Plymouth Rocks, as well as Leghorns, Houdans and Hamburgs, do not suffer to any appreciable extent when hatched late in the season. For late breeding the Brahmas and Cochins are preferred by the Monthly when it is desired to raise them for market. When well cared for and liberally fed, these late hatched chicks grow wonderfully fast, acquire flesh rapidly, and in six weeks reach a marketable size.

We notice that our own Plymouth Rock hens are more disposed to set lately than earlier in the season, and three or four brought off broods during August. They are not so good mothers, however, as some other breeds, leaving their chicks too young sometimes, to attend to their favorite duty, egg laying.

Care of Poultry.

The care of poultry, during the cold winter months, determines in a marked degree the results of the year, in the profit and loss account. It is absolutely impossible to make the poultry business pay if the stock on hand be neglected, and uncared for. As well expect a half-frozen, half-starved cow to give a bountiful supply of milk, as to expect fowls in the same condition to furnish eggs. We have experimented with nearly all of the prominent breeds of poultry, and have never yet found one to which neglect was not fatal.

Fowls require to be provided with suitable shelter, fully as much as any other stock, as their nervous system is very susceptible to outside influences, and any change, even in the manner of feeding, or change of hours for feeding, or change in kinds of food fed, will affect them. We need only to call attention to the beneficial effects of warmth to cause all to admit its desirability, but do not on that account go to the other extreme of entirely excluding or neglecting ventilation. Compel the birds to endure the cold rigor of our northern winter, rather than force them to inhale the noxious vapors and endure the close, debilitating atmosphere of an over-crowded hen-house. Give your chickens, then, a warm house, if possible, suitably ventilated, and you will have taken the first step in the right direction.

FOOD FOR FOWLS.

The amount and kind of food furnished fowls, will materially vary the number of eggs received from them during the winter. As far as this question is concerned, there are three classes of persons caring for poultry, viz: those habitually neglecting and ill-feeding; those feeding bountifully but with little judgment or knowledge; and those who are endeavoring to feed in such a manner as to produce the best results. With the first-class, we have nothing to do, as only one result can possibly follow their mode of feeding. The second class care for their fowls, but they go to the other extreme of over feeding, or give too little variety and feed too much corn in some form. We have frequently visited yards of this class, and found corn strewn over the runs, or corn meal dough filling the boxes, while the birds had eaten all that they possibly could, and were not taking exercise enough to keep them in a healthy condition. The third class, endeavors to preserve the proper means in feeding, both as to quantity and to kinds. The only rule to be given as to quantity, is to feed all that the birds will readily eat and no more. The greatest possible variety of food should be fed, keeping in mind the fact that corn, in any form, is very fattening; while wheat, buckwheat, and oats are egg producers in about the order named. Green food should not be forgotten, but fed regularly. Let a plentiful supply of clean fresh water be kept where the fowls can have constant access to it, and do not forget that a little Douglass mixture or tonic of iron, mixed with the water occasionally is of great advantage.—F. H. Corbin, in New England Farmer.

Breeders' Directory

First Resolutions, Next Revolution.

BY CHAS. W. MURTFELDT, OF KIRKWOOD, MO.

The American people are a long suffering nation. They endure hardships and provocation for a long time. But when this ceases to be a virtue they strike back, and then they strike to hurt. This same spirit leads to lynch law. It the courts fail to administer justice repeatedly, the people must even help themselves. All right minded people regret the necessity of such actions and would much rather that the court would vindicate the majesty of the law. A man or men have no right to do as they please unless they please to do right.

Presumably our forefathers when they framed the constitution of the United States had no idea of the power of corporations or of combined capital. That was before the age of steam or electricity, or rather before these powerful agents were harnessed to do men's bidding. Hence no sufficient safeguards were provided against the encroachments of combined capital and the lust of power of ambitious men. And just such men seem to be rushing to certain ruin upon the thick bosses of the people's patience. Just imagine a man of about five feet six or seven inches, who is being visited by the most influential people of a town, who request a respectful hearing and an audience to recount their grievences, because this same man backed by his millions has determined to lay a railroad from one end of the town to the other, diagonally across their principal streets. Bear in mind that he (J. G.) will have an air line road and will not deviate a hair's breath from his purpose, for with a very slight deviation he might avoid the dispoiling of the town. Does he receive them politely and listen to their complaints? Not a bit of it. He dismisses them with a frigid, "gentlemen I am very busy just now, excuse me." Next he comes to the ground, elaborately laid out in walks, bosquets, orchards and lawns, of a wealthy physician. He means to spoil this beautiful home where the doctor and his family intended to spend their few days. The doctor also visits J. G., who hears him for a few moments and then says, "doctor, yours is a hard case, but we will pay you for your property." The doctor does not want to sell, no more than the citizens of the village desired to vacate, but what does the millionaire care for that and the law? Why, the law affords no redress? How long, oh! how long must the people suffer? Imagine this same little man seated upon a tripod controlling the lightning of the telegraph as it circles the globe, under oceans over mountains and over valleys and rivers and plains, and thus to control to a great extent the markets of the world and the fortunes of men who have just as good right to buy and sell and get gain as Jay Gould or William Vanderbilt. The question arises, how did these men amass their immense fortunes? I answer, not by legitimate trade or business, but by the worst kind of stock gambling, dissimulation and fraud. But my friends there is no success like success. Many a man bows to wealth and its owner. If those men and their fellows can, and do (as is alleged with most probable truth), control legislatures and courts and municipal governments and suborn them to their lust of power and lust of lucre, there will come a day as sure as the sun shines, when the people, the sovereign people of these United States, will demand (and I need not add insist upon with success) that the control of these great national highways the railroads, and the speediest mode of communication, the telegraph shall be managed for the common good of the whole nation by the general government, and the managers will then be held to a strict account or deposed by the people at the polls, and thus will this inordinate ambition be checked, God speed the day? And the people must be ready for the event when it comes and vote.

Increasing Use of Compound Oxygen by Physicians.

A large and steadily increasing number of intelligent physicians in all parts of the country are using Compound Oxygen in chronic cases which they have not been able to cure with ordinary remedies. Writes one: "I shall make the Oxygen Treatment a prominent feature in my practice, for I have tested it sufficiently to satisfy me of its merits." Says another: "I do know my patient is a hundred per cent. better, and is gaining rapidly. His left lung was almost consolidated, but is now free except in one small spot." Another physician, who used it in his own case, says: "I was relieved, the first time I used it, of a very severe catarrh trouble; and my lung trouble promises to be a thing of the past." Writes another: "I am thoroughly convinced that the Compound Oxygen is what we need in a vast army of chronic diseases." We could give columns of extracts from our correspondence with physicians who are using this new treatment, all of the same tenor. If you wish to know what Compound Oxygen is, and what it cures, send for our Treatise on its Nature, Action, and Results. It will be mailed free. Drs. STARKEY & PALEN, 1109 and 1111 Girard street, Philadelphia, Pa.

Says the Canadian weather prophet: I predict for Great Britain a very severe winter, preceded by a cold and wet autumn. This cold weather will set in unusually early and the Clyde, Thames and other rivers are likely to become firmly ice-locked. The heavy snow falls this time are for the other side of the Atlantic.—Henry G. Vennor.

A Business Man's Experience.

He could not tell what ailed him. He knew his digestion was poor and his heart palpitated. He felt his nervous system was shattered. He knew his urine was milky and ropy, but he had suffered from these disorders for years. Only of late had he begun to feel himself completely exhausted and his nervous system shattered, and his constitution broken down. A friend recommended Brown's Iron Bitters. It suited his case precisely, and now he is as healthy, robust and strong as his heart could desire. Go thou and do likewise, then may you live long and be happy.—Commercial.

Consumption Cured.

BALTIMORE, MD., February 12, 1881.

Upon the recommendation of a friend, I tried Brown's Iron Bitters as a tonic and restorative for my daughter, whom I was thoroughly convinced was fast wasting away in Consumption. Having lost three daughters by the terrible disease, under the care of eminent physicians, I was loth to believe that anything could arrest the progress of the disease; but to my surprise, before my daughter had taken one bottle of Brown's Iron Bitters, she began to mend, and is now quite restored to her former health. A fifth daughter began to show signs of consumption, and when the physician was consulted, he quickly said, "Tonics were required!" And when informed that the elder sister was taking Brown's Iron Bitters, responded, "That is a good tonic, take it."

ADORAM PHELPS, of Askey & Phelps.

St. Louis Amusements.

The superb production of Steele Mackay's great play, "Won at Last," at Pope's Theatre, has met with wonderful success—the houses being crowded at every performance. It will be repeated every evening the present week, and at the regular matinees. On November 20th the grandest spectacular play of the age, "Michael Strogoff," will be produced with gorgeous scenery, dresses, etc.

At the Grand Opera House, the current attraction is the Comley-Barton Comic Opera Company. The "Olivette" of this troupe, surpasses all others; the leaders, John Howson and Catherine Lewis, being the best in their line. Jno. T. Raymond, the favorite comedian, appears as "Fresh, the American," next week.

M. B. Curtis, the inimitable representative of the Hebrew drummer, is drawing enormous houses to the Olympic Theatre, and his creation is unequaled in its way. It is one laugh from beginning to end, and its chief attraction is its naturalness. November 21st the Madison Square Theatre, "Hazel Kirke" Company, will begin an engagement.

The People's Theatre is reaping a harvest with the Forepaugh-Adams Pantomime Company, and their Humpty-Dumpty is superior to any presented here for years. The tricks are new and ingenious, the situations amusing, and the specialties very funny. November 21st, Hoey & Hardy's Combination appear in a sterling legitimate play, "The Child of State."

Our Progress.

As stages are quickly abandoned with the completion of railroads, so the huge, drastic, cathartic pills, composed of crude and bulky medicines, are quickly abandoned with the introduction of Dr. Pierce's "Pleasant Purgative Pellets," which are sugar-coated, and little larger than mustard seeds, but composed of highly concentrated vegetable extracts. By druggists.

An entire cargo of potatoes in bags from France arrived in New York per steamer Chateau Lafitte, from Bordeaux. The crop is very large there. The steamer returns with American grain. Is this a base attempt of the French to send back our cherished potato bugs? Potatoes are worth in France, at the port of Havre, from 45 to 54 cents per American bushel, according to variety, and all of good quality.

The Salutary Effects

of Simmon's Liver Regulator upon the nervous system, prostrated by long suffering with dyspepsia, constipation and kindred diseases, is without a precedent. Its tonic, cathartic and alterative effects are truly wonderful.

The sweet potato crop of Accomac county, eastern shore of Virginia, is valued this year at $1,000,000. In Virginia's two peninsuls counties peach trees planted in 1816 bore good crops this year. The Eastern Virginian says the two counties can show more living persons from seventy to one hundred years old than any other county of the same population on the continent.

Important Notice to Newspaper Readers.

The first number of MAXSON'S SUBSCRIPTION JOURNAL, published at West Liberty, Iowa. has made its appearance. It is a twenty-four column paper, devoted mainly to the subscription business. It will save you money to write for a sample copy before making your selections of newspapers and magazines for the coming year. Address

JONT. MAXSON & Co.,
West Liberty, Iowa.

Of all dreary places, deliver us from the dreary farm houses, which many call home. Bars for a front gate, chickens wallowing before the door, pig pens elbowing the house in the rear, scraggy trees never cared for or no trees at all, no flowering shrubs, no neatness, no trimness; and yet a lawn, and trees, and a neat walk, and a pleasant porch, and a plain fence around, do not cost a great deal. They can be secured little by little, at odd times, and the expense hardly felt. And if the time comes when it is best to sell the farm, fifty dollars so invested will often bring back five hundred, for a man is wrong who will not insensibly give a higher price for such a farm when he thinks of the pleasant surroundings it offers his wife and children.

The Youth's Companion,

of Boston, is a sprightly, entertaining paper, deservedly popular, and is, without exception, the best of its kind published in America. It is filled to overflowing with the choicest original matter, and of so diversified a character that it never fails to interest, instruct and amuse, and is welcomed in the household by young and old alike.

BORDEN, SELLECK & Co., St. Louis, sell the best and cheapest Car Starter made. With it one man can move a freight car.

MODERN THOUGHT.—The whole of modern thought is steeped in science; it has made way into the works of our best poets; and even the mere man of letters, who affects to ignore and despise science, is unconsciously impregnated with her spirit and indebted for his best products to her methods. I believe that the greatest intellectual revolution mankind has yet seen is now slowly taking place by her agency. She is teaching the world that the ultimate court of appeal is observation and experiment, and not authority; she is teaching it to estimate the value of evidence; she is creating a firm and living faith in the existence of immortal, moral, and physical laws, perfect obdedience to which is the highest possible aim of an intelligent being.—Huxley's Lay Sermons

From the Danvers (Mass.) Mirror: Mr. Geo. H. Day, of this town was cured of rheumatism by St. Jacobs Oil.

The Markets.

ST. LOUIS, November 16, 1881.

[Prices herewith are for round lots in first hands. Small order lots charged at higher prices. Buyers pay first ten days' storage, except in special bins.]

FLOUR—Sales: 17 bbls at $3 70, 100 at $4 40, 90 at $5 10, 50 at $5 35, 42$5 55, 37 at $5 60, 75 at $5 70, 50 at $5 55, 32 at $6 10 125 at $6 25 del, 100 at $6 75, 125 at $6 95 del, 40 at $7 50, 1,000 on p. t.

BUCKWHEAT FLOUR—Demand light. Choice New York at $10.

RYE FLOUR—Firm at $6 00@6 25, as in kind.

CORN MEAL—Active and firm. Sales of city on orders at $3 25@3 30 del. Grits, hominy and pearl meal at $5 25 del.

WHEAT—No. 2 red at $1 35, No. 3 red at $1 27, No. 4 at $1 16. Mediterranean—No. 2 at $1 35, No. 3 $1 31.

CORN—No 2 mixed at 64½c, No 2 white-mixed at 68c, rejected white-mixed at 64½c. rejected 59c.

OATS—No. 2 at 44¼c, mixed at 46c, prime at 48½c.

RYE—Grade No 2 at 97c. Samples at 94c.

BARLEY—At 80c@$1 06.

HAY—Prime prairie at $12@13, choice at $14 50, prime timothy at $18@18 50, choice timothy at $21.

HEMP—Common and undressed $95@100; good to choice $105@120; dressed $160 to $190; shorts $130@150; hackled tow $65@75.

BUTTER—No material change in the market for the past few days. Receipts fair, and demand steady for all the better grades. We quote: fancy creamery 35@36c; fair to choice 33@35c; fancy dairy 31@32c; good to choice 25@30c; fair to good 20@25c; common to fair and store packed, etc., 12@20c.

CHEESE—Good to choice full stock 12@14c; good to choice part skim, 11@12½c; old and poor 3@6.

EGGS—Scarce and higher at 22@25 for fresh.

LIVE POULTRY—But very little doing. Sales: Old hens $1 80; mixed 1 50@1 65; young—choice $1 75@1 80, good 1 25@1 40; turkeys $4@7; ducks $1 75@2 00; geese $2 50@3 50.

GAME—We quote: Grouse at $4 00, quail $1 60@1 75; ducks—mallard $2 00, teal $1 50, snipe $1 00, plover 50@75c, rabbits $1 50, squirrel 75@90c; deer 5@7c ₱ lb gross; wild turkeys 35c@$1.

POTATOES—In steady demand and firm. Sales: Minn. Peerless 97½c; Iowa do 1 10; N. Y. Rose at $1 12½ per bu.

SWEET POTATOES—Jerseys at $2 50@2 75 per bbl; home-grown Nansemond 1 15@1 20; Bermuda at $1 ₱ bu. loose.

ONIONS—Lower and dull. Yellow $3 00 per bbl; prime red $2 00@2 25.

CABBAGE—At $4 00 per crate.

SAUER KRAUT—Dull at $10@11 00 ₱ bbl. and $5 25@5 75 ₱ half-bbl.

CELERY—In fair supply and quiet at 30@50c per bunch as in kind.

TURNIPS—Sell in shipping order at $1 50 per bbl.

WHITE BEANS—Prime at $3 25.

APPLES—We quote: Geniting at $2 00@2 75, Winesap and Willow Twig at $3 50@4 00, Ben Davis at $3 75@4 25.

DRIED FRUIT—In demand and firm. Apples at 6c for fair to 6¾c for prime and 7c for bright new. Peaches at 6@6¾c.

FLAXSEED—Better and more doing; firm at $1 39 pure test.

PECANS—Firmly held. Western 8@8½c, Texas 8@10½c.

PEANUTS—Demand only for choice. Red 4c, white 5c.

GRASS SEEDS—Timothy at 2 55@2 60; German millet $1 45; Hungarian 60@75.

HEMP SEED—Nominal at $1 90@2 bid for round lot choice.

BONES—Sell at from $16@19—latter for dry buffalo.

CASTOR BEANS—Not wanted above $1 80 for prime.

SALT—Lake sells at 1 35@1 40 per bbl; G. A. at $1 10@1 15 per sack.

HOPS—New crop sells at 31@33c.

SCRAP IRON, ETC.—Burnt 35c, stove-plate 60c, plow 80c, heavy cast 80c, wrought $1 15, brass $7@13, copper 13, zinc 3, lead 4.

RAGS—Country mixed at $2 00@2 25 per 100 lbs; old rope 2¾c per lb.

EMPTY BARRELS—Coal and other light oil barrels at $1 20; whiskey do $1.

WOOL—Tub-washed choice at 39c, fair at 34@37c, dingy and low at 30@33c. Unwashed medium 24c, choice 25c, low and coarse 18@20c, light fine 22@23, heavy do 15@18c.

HIDES—Dull. Dry flint 17c—damaged 14c; dry salt 13c—damaged 11c; dry bull and stag 10½c; green salt 9¼c—damaged 7¼c; green uncured 7½c—damaged 6c; green bull and stag 6½c. Glue stock at 3c green to 5c dry.

FEATHERS—Firm we quote: Prime L. G. at 43@45c; unripe and quilly do 39@41c; old and mixed range from 20c to30c; tare 3@10 per cent.

DEER SKINS—Bug-eaten, salted and damag- at 30c to 35c; No 1 at 47c.

SHEEP PELTS.—Green 50@85c, dry salt 40@70c.

CATTLE—Export steers $6 40@6 75, good to heavy steers $5 80@6 35, medium to fair steers $5 00@5 65, fair to good Colorado steers $4 75@5 60, fair to good stockers $2 50@3 00, fair to good feeders, 1,000 to 1,100 lbs. $3 10@3 60, native cows, common to choice $2 25@4 10, native heifers, fair to choice $3 25@4 25, common to choice native oxen $3 00@4 25, good to choice corn-fed Texan steers $4 00@5 20, medium to fair corn-fed Texan steers $3 25@3 70, inferior to common mixed $3 00@3 25, common to good grass Texans $2 50@3 40, milch cows with calves $20 00@50 00, veal calves $5 00@10 50, Scalawags of any kind 1 50@2 25.

SHEEP—Common to medium muttons $2 85@3 25; fair to good muttons $3 00@3 40; good to choice muttons $3 60@4 40; stock sheep $2 00@2 85; lambs per head $1 50@3 00.

HOGS—Yorkers $5 90@6 10, good to heavy shipping $6 35@6 60, fair to good heavy snipping $5 90@6 30, coarse and roughs $5 00@5 50, pigs $5 60@5 75, stockers $4 00@5 50.

The possession of real estate is a substantial capital. If one's title is good, no thief can steal it; it needs no insurance policy to make it safe, nothing short of an earthquake can swallow it, and they don't send up earthquakes to accommodate jealous neighbors.

A correspondent of the London Times advises British farmers to render themselves tolerably independant of the uncertainties of the hay crop by adopting the American system of raising corn fodder. He justly remarks that though the maize plant does not ripen its grain in England, "it will grow sufficiently vigorous during the months of June, July and August to afford heavy crops of first-rate forage."

Consumption Cure.

Dr. R. V. PIERCE: Dear Sir.—Death was hourly expected by myself and friends. My physician pronounced my disease consumption, and said I must die. I began taking your "Discovery" and "Pellets." I have used nine bottles and am wonderfully relieved. I am now able to ride out.

ELIZABETH THORNTON, Montongo, Ark.

The experiments made many years ago by the Messrs. Lawson, of Edinburgh, with grass seed, showed that nearly all grew when covered not over half an inch deep; only about one-half grew at the depth of an inch to an inch and a half, and none from a depth of two inches. The kinds experimented with were orchard grass, timothy, and red and white clover. Very similar were the results of the trials made in this country by G. Trowbridge in 1858, the plants of clover and timothy diminishing in size with the depth of covering, none growing from a depth of two and a half inches. In three months the plants from the shallow covering were a foot high; those from greater depths only five or six inches.

Lydia E. Pinkham's Vegetable Compound is a remarkable remedy for all those painful complaints and weaknesses so common to our best female population. Send to Mrs. Lydia E. Pinkham, 233 Western Avenue, Lynn, Mass., for pamphlets.

In regard to the English wheat crop, the London Times says: "This is the eighth bad wheat crop in succession, and the failure in each of the eight seasons is referable to the same cause—bad weather in harvest time. Already the question of abandoning wheat growing altogether in England is being discussed." Mr. Caird advises the English farmers to "give up raising wheat and corn in the face of the ruinous competition from America."

A contemporary writer says: "It is the deliberate judgment of the people of this country that the most serious danger to which we are now subject is due to partisan civil service. Corruption of the ballot, disgraceful campaigns, all come from the "spoils" theory which distributes offices as rewards for services done for an individual or for a party. It was this that fired the pistol of Guiteau. If this does not arouse public sentiment sufficiently to secure a reform of civil service, the danger must be greater than most of us have believed. If assassination does not bring a change, it will only come through bloody revolution. This is a matter that cannot be trifled with any longer; corruption must be made odious, for it is treason of the worst kind."